

BIODIVERSITY:

Taking care of creatures great and small



On 22 May we celebrate the diversity of life on Earth, from the tiniest insects to the largest animals that make our planet the special place it is.

From the hot arid deserts of the Sahara in Africa, through the lush green rainforests of the South American Amazon, to the ocean depths and bright corals, our natural world is a marvel of different landscapes, materials, colours and textures. Every year we celebrate the International Day for Biological Diversity to remind us of the important role of the variety of life on our planet in providing for our wealth, health and well-being.

The Earth consists of many millions of distinct biological species – the product of four billion years of evolution. According to the latest count, scientists have described over 1,5 million species of animals, plants and algae, with new species

being discovered every day. These species are like little parts in a complex machine (the planet) – everything even the lowliest microbe plays a part in keeping this machine running smoothly.

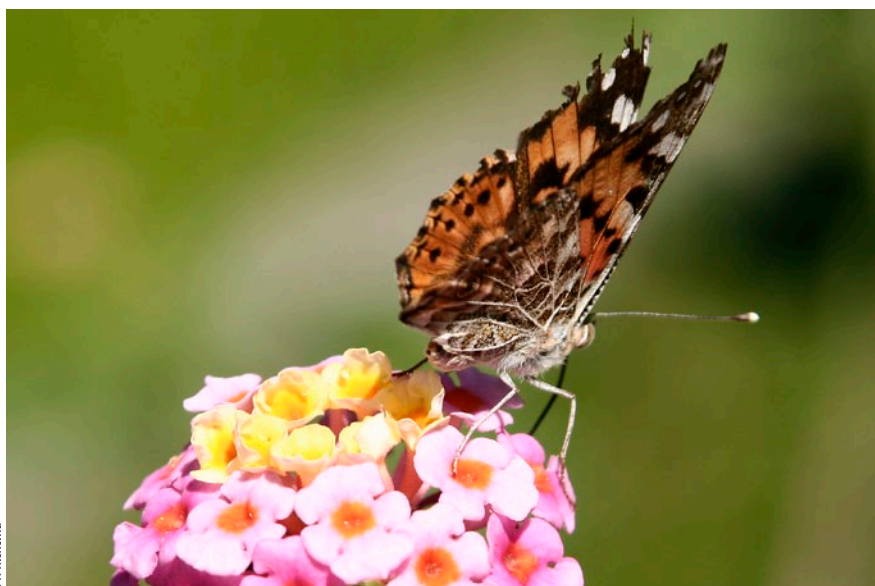
We do not always realise it, but these species, whether they be plants, animals or insects, play a very important role in our lives. We depend on nature for our food, water, and shelter – even medicines. Medicines such as painkillers, penicillin and inoculations are all based on natural organisms. Wild plants are also constantly being screened in search of new cures.

To date, however, humans have not done a very good job in protecting biodiversity. We are responsible for the fact that every 24 hours between 150 and 200 species become extinct. This is mainly because of increased pressures on natural systems due to human population increase, habitat

A WEALTH OF LIVING THINGS

- South Africa has more than 20 300 species of flowering plants. one of the six most significant concentrations of plants in the world is the Cape Floral Kingdom, with its distinctive fynbos vegetation.
- The country boasts 243 species of mammals. A total of 17 of these are threatened, including the black rhino, pangolin and giant golden mole. The riverine rabbit, roan antelope and wild dog are endangered.
- Of the more than 800 bird species found in South Africa, 26 are threatened, including the African penguin, Cape vulture, martial eagle, bateleur and Cape parrot.
- In total, 370 reptiles and amphibians occur in South Africa.
- The country boasts 220 fresh-water fish, of which 21 are threatened. There are more than 2 000 marine fish species.

Source: Department of Environmental Affairs





www.sxc.hu

destruction, overexploitation (such as hunting and fishing), pollution and the introduction of invasive alien species. Once species and habitats are lost they can never be replaced.

South Africa is considered the third most mega-diverse country in the world. With a land surface of 1,1 million km² – representing just 1% of the Earth's total land area – the country contains almost 10% of the world's total known bird, fish and plant species, and over 6% of the world's 6% of the world's mammal and reptile species. This is because of South Africa's wide range of climatic conditions and its many variations in topography (from narrow coastal plains, to steep escarpment, and large plateaus).

What can the ordinary person in the street do to protect biodiversity? Well, according to the World Wildlife Fund (WWF) there are quite a few things. Firstly, if you are on holiday (even in South Africa) be careful of buying souvenirs made from skin, fur, bone, shell, beak or hooves, as these might be from endangered species.

Secondly, question where your garden furniture or wooden flooring comes from – every year some 13 million hectares of natural forest are lost. It's best to buy wood

and wood products that come from a sustainable legal source. We can also protect biodiversity by reducing our paper consumption and using recycled paper. Every ton of 100% recycled paper saves 24 trees.

One of the biggest threats to the marine environment is our insatiable demand for seafood. By dialling the SASSI FishMS number, 079 499 8795 (in South Africa), you can determine whether that fish on your plate is endangered or not. The South African Sustainable Seafood Initiative (SASSI) has also created a seafood database containing information on the conservation status of fish species (<http://sassi.icecream-lovestheweb.com/home.asp?m=7&s=2>).



www.sxc.hu

BIODIVERSITY WORDS

Biodiversity: Biological diversity or biodiversity refers to the number, variety and variability of all living things on Earth.

Biological resources: Those components of biodiversity of direct, indirect or potential use to humanity.

Biome: A major portion of the living environment of a particular region characterised by its distinctive vegetation and maintained by local climatic conditions.

Ecosystem: A dynamic complex of plant, animal and microorganism communities and their non-living environment interacting as a functional unit.

Endemic: Restricted to a particular area, used to describe a species or organism that is confined to a particular geographical region.

Habitat: The place or type of site where an organism or population naturally occurs.

Invasive alien species: Those species which occur outside their natural range and threaten the existence of native plants and animals.

Source: WWF

WEB RESOURCES

http://wwf.panda.org/about_our_earth/biodiversity/
<http://science.howstuffworks.com/evolution/mass-extinction1.htm>
www.cbd.int/ldb/
www.deat.gov.za
www.unep.org/iyb/
www.wwfsassi.co.za