Kakadu National Park - on World Heritage List for both natural and cultural values
-- 200km east of Darwin in the Northern Territory
-- 19,000 square km
-- Main formations: Stone Country, Lowlands, Coastal Plain
-- The Arnhem Land plateau is an area of deeply dissected sandstone with rugged cliffs and escarpments
-- Lowlands: wooded savannas Eucalyptus, tropical monsoon forests, billabongs
-- Soils acidic and infertile
-- Four major river systems

Cultural heritage: some of the oldest and best preserved archaeological sites in Australia. Galleries of the world's finest rock art; human occupation between 40 to 60,000 years ago

Climate: wet-dry tropics
Wet season: November-April localized monsoonal depressions bringing heavy rain and tropical cyclones - flooding

Hydrology: The main drainage system starts as a runoff from the sandstone plateaus; streams with sandy channels; 4 rivers: East and South Alligator Rivers with braided alluvial channels
Creeks: Magela, Jim Jim, Nourlangie - not continuous to the main river, they divide and distribute water to the expansive floodplain - these act as large retarding basins by the end of the dry season, most of the floodplains dried up leaving isolated deep billabongs
Final stage of rivers are the estuaries: relatively narrow tidal channel formed by silty levee banks often with narrow ribbon of mangroves
groundwater stored in cracks in the basement rocks, mostly porous limestone
Water quality in billabongs: end dry season: high T-O2 deficit, high concentrations of potentially toxic heavy metals (clays high cation exchange capacity)

Flora: ~ 1500 species
seasonally flooded forested wetland
Melaleuca spp. - paperbark swamp - seasonally inundated floodplains - many uses (Florida!!)
Pandanus aquaticus specially cut leaves used for rock paintings

grassland-sedgeland:
Eleocharis spp. (dulcis), Hymenachne, Oryza,
Nymphaea, Nelumbo nucifera - seed heads highly nutritious, Lotus rhizomes

Fish - (55 species of FW fish) barramundi (Lates calidifera) (namangorrl) -
Birds: more than 60 species of waterbirds (over 1/2 million in dry season)
Magpie goose (Anseranas semipalmata) used as a meat source
Wandering wistling ducks (Dendrocygna arcuata)
Comb crested jacana - (Irediparra gallinacea)
Black-necked stork, jabiru (Ephippiorhynchus asiaticus) - symbol of Kakadu wetlands
Australian Pelikan - the largest, breeds at Lake Eyre, Kakadu dry season
Freshwater and estuarine crocodile (Crocodylus johnstoni and porosus) hunted for food (meet and eggs)

Introduced species:
Significant threat: Mimosa pigra, Salvinia molesta, Brachiaria mutica
Mimosa: native Central America; introduced late last century,
Salvinia: native to Brazil; doubling time 21/2 days!; biological control agent weevil Cartobagous salviniae
Asian water buffalo - introduced in 1840 - major impact on vegetation by 1990 100,000 removed
Cane toad (Bufo marinus)

Fire management - grass fires (used by Aboriginies) not "crown fires" vegetation well adapted