

UPDATED INFORMATION ON RAMSAR SITES IN UGANDA.

Lake Bisina Wetland System. Serere, Amuria, Ngora, Kumi, Katakwi, Soroti; 80921.58 ha; 01°43'N 033°54'E. Important Bird Area. A shallow freshwater lake with a thin strip of fringing papyrus swamp, part of the Lake Kyoga Basin lakes. Water lilies, a declining habitat in much of Uganda, dominate the shallow areas, which is important for its diversity of macrophytes. It is used as a feeding ground by wading birds, including the globally vulnerable Shoebill (*Balaeniceps rex*). The system is also important as a refuge for fish species that have gone extinct in the main Ugandan lakes such as Lakes Victoria and Kyoga. The lake is very important for the surrounding communities in terms of fishing, transport, and supply of water for domestic use and livestock. It is especially critical during times of famine, e.g., a rhizome of the *Nymphaea* genus is used as food during droughts. The site falls outside the Karamoja Protected Area system and there are no legal protections proposed. A community-based management plan has been prepared, and a local fisheries association promotes sustainable fisheries development. Ramsar site no. 1633.

Lake George. Kitagwenda, Rubirizi, Bunyangabu, Kabarole, Kasese, Kamwenge; 49813.5 ha; 00°07'N 030°02'E. Added to the **Montreux Record**, 4 July 1990. Biosphere Reserve; National Park. A complex of river systems emanating from the Rwenzori Mountains supplying a system of permanent swamps located on Lake George, in the Rift Valley. Vegetation consists of grassland, woodland, and three major swamp types. The site supports large mammals, including elephants, hippopotamus, and antelope, and is important for numerous species of wintering Palearctic waterbirds and various notable resident birds. Mine water seepage, agricultural runoff, and effluent inputs are impacting the site. A research station is located on the site. Chemical seepage from Kilembe mines and inflow of agricultural chemicals into the wetland resulting from the Mubuku Irrigation Scheme have led to listing on the Montreux Record in 1990. Ramsar site no. 394.

Lake Mburo-Nakivali Wetland System. Isingiro, Kiruhura, Rakai, Lwengo, Lyantonde; 38149.72 ha; 00°40'S 030°57'E. National Park (partly). A system of open and wooded savanna, seasonal and permanent wetlands, and five lakes, of which Lake Mburo is by far the largest. The system is a unique habitat, lying at the convergence of two biological zones, giving it very high biodiversity. It supports globally threatened species of birds such as the Papyrus Yellow Warbler and Shoebill, and provides refuge to 22 species of Palearctic and Afro-tropical migrant birds during adverse conditions. It supports two of the endangered cichlid fish species, which have gone extinct in the main lakes, and it is the only area in Uganda in which the Impala is found. The site is also of immense socio-economic value as a source of water for domestic use, livestock and wildlife; pasture for the local herds during droughts; fish; and materials for crafts and thatching. The park is also used for tourism and scientific research. Hunting, habitat destruction and over-fishing are the main threats to the area. The Wetland Management Department in collaboration with Uganda Wildlife Authority developed a management plan for the site. Ramsar site no. 1634.

Lake Nabugabo wetland system. Masaka, Kalungu, Gomba, Mpigi, Butambala; 69584.76 ha; 00°24'S 031°54'E. A shallow freshwater lake 8.2km long by 5km wide, with three smaller lakes, separated from Lake Victoria by a sand bar ca.2km wide; there are no surface outflows from the lakes, only seepage through the sand bank. The

lakes, separated from Victoria for the past 3,700 years, are very interesting for the fish and their evolutionary history: several endemic fish remain that have become depleted or extinct in Victoria by the introduction of Nile perch. The lakes are an important migratory stopover-destination for migratory bird species - at times during the year, the site (listed as an Important Bird Area) holds more than 15% of the world's population of the Blue Swallow and support five globally threatened and near-threatened birds: Blue Swallow *Hirundo atrocaerulea*, Shoe Bill *Balaeniceps rex*, Great Snipe *Gallinago media*, Pallied Harrier *Circus macrourus*, and the Papyrus Gonolek *Laniarius mufumbi*. The system supports a high diversity of plant species, including insectivores of the family *Droseraceae*. The lakes have long served local communities for subsistence and commercial fish, sources of water, and handicraft materials; under population pressures, crop cultivation and dairy farming are increasing. There are a number of holiday and conference centres, and boating and swimming are especially popular as the lake has a reputation for being free of schistosomiasis (*bilharzia*). Under the national constitution (1995), all wetlands are held in trust for the people, though some farms and resorts have long-term leases. Ramsar site no. 1373.

Lake Nakuwa Wetland System. Pallisa, Buyende, Kaliro, Luuka, Serere, Kumi, Ngora, Namutumba, Soroti; 172560.85 ha; 01°15'N 033°31'E. Important Bird Area. A permanent wetland associated with a number of satellite lakes and a swamp system dominated by dense papyrus, broken in parts by pools of water-forming sudd (clumps of floating papyrus). In addition to supporting the Sitatunga and the Nile Crocodile, the system and its satellite lakes contain the most diverse cichlid species assemblage and are a haven for a number of non-cichlid species no longer found in the large lakes of Kyoga and Victoria. The system provides refuge to fish taxa that have been reported extinct in the main lakes, thanks to the protection accorded by the aquatic vegetation around the lakes, which prevented the Nile perch from spreading there. The wetland also plays an important role in flood prevention, water purification and groundwater recharge. It is probably one of the remaining pristine wetland areas in Uganda due to its remoteness and sparse population in the immediate catchment, and it offers employment to a number of fishermen. The papyrus is used for making mats, thatching, and crafts. The potential threats to fish species diversity include human exploitation, collection of ornamental fish for export, degradation of the fish habitat, spread of the Nile Perch, and water hyacinth. Papyrus over-harvesting and land reclamation for agriculture also constitute a threat. Ramsar site no. 1635.

Lake Opeta Wetland System. Nakapiripirit, Bukedea, Bulambuli, Nabilatuk, Kween, Sironko, Katakwi, Kumi; 127400.11ha; 01°42'N 034°14'E. Important Bird Area. One of the remaining intact and probably most important wetland marshes in Uganda. It is predominantly an extensive swamp of *Vossia cuspidata* to the east and south graduating into dry *Hyparrhenia* grassland savannas. The wetland is of great importance for the conservation of birds, and Fox's weaver, Uganda's only endemic bird, has been recorded in the swamp breeding. The site is also important as a refuge for fish species that have gone extinct in the main lakes, including Lakes Victoria and Kyoga. During the dry season the site provides the only refuge for animals from the Pian-Upe wildlife reserve. The area is mainly used by the Karimojong and the Pokot people for grazing their animals in the dry season. It serves as a source of fish protein at both subsistence and commercial level, and cultivation (maize, millet and plantain) is carried out in the catchment. Pian-Upe Wildlife Reserve has potential for big game

viewing and birdwatching, but because of the insecurity, tourism development has been minimal and the reserve does not generate any revenue. A community-based wetland management plan was done in 2007. Ramsar site no. 1636.

Lutembe Bay Wetland System. Wakiso; 1279.7 ha; 00°10'N 032°34'E. Important Bird Area. Situated at the mouth of Lake Victoria's Murchison Bay, this shallow area is almost completely cut-off from the main body of Lake Victoria by a *C. papyrus* island. The site supports globally threatened species of birds, endangered Cichlid fish, and over 100 butterfly species, including three rare ones. It is a breeding ground for *Clarias* and lungfish, and regularly supports more than 52% of the White-winged Black Terns (*Chlidonias leucopterus*) population. The system plays an important hydrological role, with the swamps surrounding the Murchison Bay acting as natural filters for silt, sediments and excess nutrients in surface run-off, wastewaters from industries, and sewage from Kampala City. Lutembe Bay is being reclaimed and decimated for horticultural activities and the surrounding highly populated areas have been strongly affected by commercial and industrial development, urban wastewater, and conversion to agricultural land. A number of NGOs have been conducting conservation education activities in and around Lutembe, with the Uganda Wildlife Education Center (UWEC) only about 5 km from the bay. Ramsar site no. 1637.

Mabamba Bay Wetland System. Wakiso, Mpigi; 22375.39 ha; 00°07'N 032°21'E. Important Bird Area. An extensive marsh stretching through a narrow and long bay fringed with papyrus towards the main body of Lake Victoria - the only swamp close to Kampala where one can easily find the globally-threatened Shoebill (*Balaeniceps rex*). The site supports an average of close to 190,000 birds and is part of the wetland system which hosts approximately 38% of the global population of the Blue Swallow (*Hirundo atrocaerulea*), as well as the globally-threatened Papyrus Yellow Warbler and other birds of global conservation concern. The site supports a lucrative fisheries activity and is a source of fish for home consumption and commercial use, as well as of raw material for local crafts, building materials, water for domestic and livestock use, and non-wood products. Factors needing attention are the dry season incursion into the swamp by fishermen; hunting of the Sitatunga by local people; the proliferation of the Water Hyacinth; and the poaching of Shoebill. The proliferation of flower farms along the shores of Lake Victoria and the use of agrochemicals is likely to have an impact. *Nature Uganda* spearheaded the development of a National Important Bird Areas Conservation Strategy (NIBACS) that highlights measures and strategies for the conservation of the Bay. Ramsar site no. 1638.

Murchison Falls-Albert Delta Wetland System. Masindi, Bullisa, Nwoya; 4963.13 ha; 01°57'N 031°42'E. National Park (partly), Important Bird Area. The site stretches from the top of Murchison Falls, where the River Nile flows through a rock cleft some 6m wide, to the delta at its confluence with Lake Albert. The convergence between Lake Albert and the delta forms a shallow area that is important for waterbirds, especially the Shoebill, Pelicans, Darters and various heron species. The delta is an important spawning and breeding ground for Lake Albert fisheries, containing indigenous fish species; the rest of the site is dominated by rolling savannas and tall grass with increasingly thick bush, woodlands and forest patches in the higher and wetter areas to the south and east. It forms a feeding and watering refuge for wildlife in the National Park during dry seasons. Murchison Falls are one of the main tourist attractions and recreation areas in Uganda, and the site is of social and cultural

importance to the people of the area: livestock grazing; fishing, with fish exported to DR Congo and also used to feed the refugees in camps in northern Uganda; illegal hunting for game, etc. Conflicts between fishermen and crocodiles are common. The site has been proposed for UNESCO World Heritage status. Ramsar site no. 1640.

Nabajuzi Wetland System. Masaka, Lwengo, Bukomansimbi, Kalungu Sembabule; 20216 ha; 00°46'S 031°41'E. Important Bird Area. A long narrow stretch of swamp from the periphery of Masaka to the major Katonga River system. It provides a spawning ground for mudfish and lungfish, and supports globally threatened bird species and the endangered Sitatunga. The site lies in traditional Buddu county of Buganda Kingdom, and some of the flora and fauna are closely associated with cultural norms and traditions, especially the totems. There is thus considerable cultural attachment of the surrounding areas to the wetland, which also plays an important role in stabilizing the banks of River Nabajuzi, groundwater recharge, flood control and as a natural filter for silt and sediments in the runoff. The wetland is the source of water supply for nearby townships and provides fish, clay, papyrus, medicine and game meat (Sitatunga). Over the past 20 years there has been increased commercialisation of the resource products and some of the surrounding areas have been built up into trading centres and small towns, causing increased demand for resources. Water pollution from a tannery adjacent to the wetland is a big threat. The Wetlands Management Department and NGOs such as *Nature Uganda* are implementing conservation and ecotourism activities. Ramsar site no. 1639.

Sango Bay-Musambwa Island-Kagera Wetland System (SAMUKA). Kyotera, Masaka, Rakai; 85955.85 ha; 00°55'S 031°46'E. Important Bird Area. A mosaic of wetland types including the biggest tract of swamp forest in Uganda, papyrus swamps, herbaceous swamps interspersed with palms and seasonally flooded grasslands, sandy, rocky and forest shores, and three rocky islets about 3 km offshore in the Sango Bay. The area lies in the transition between the East and West African vegetation zones and this biogeographical ecotone makes it biodiversity rich. The system supports huge congregations of waterbirds, hosting an average of 16.5% of the population of Grey-headed Gulls (*Larus cirrocephalus*), and hosts globally endangered mammals such as Elephant, Black and White Colobus Monkey and a subspecies of the Blue Monkey. It is a source of fish to the people of the area, of medicinal plants, of grazing and of raw materials for building and making crafts including luxurious sofa chairs and mattresses. Tourism has been developed on Musambwa Island. Relatively inaccessible, Sango Bay forests have had no immediate threats; however, as overexploitation of resources and grazing depletes the rest of the landscape, forest reserves become the immediate retreat for the surrounding communities. The site contains Stone Age artifacts, internationally known as the Sangoan industry, which dates to about 200,000 years ago. Ramsar site no. 1641.

Rwenzori Mountains Ramsar site: Kasese, Bunyangabu, Bundibugyo; 67.88ha; 00°25'N 030°00'E was noted by the geographer Ptolemy in AD 300 as the *Lunis Montae* ("Mountains of the Moon") and has continued to fascinate ever since. The entire Afro-alpine ecosystem (between 1,600 and 5,100 meters asl.) is unique; with the contribution of high rainfall and the melting of snow from the peaks, various wetland types are present such as peatlands, freshwater lakes, and tundra, amongst others. The mountains are known to support 21 species of small mammals, including the endemic and vulnerable Rwenzori Shrew. Other species of global conservation

concern include L'Hoest's monkey, Horseshoe bat, and Rockefeller's Sunbird. With the distribution of fish varying with altitude, several indigenous fish species are found within the site, with the most common Cyprinid species including *Varicorhinus rwenzorii*.

The Rwenzori Mountains continue to face challenges from increasing population pressure resulting in increased demand for agricultural land, growing tourism, and climate change, despite the stringent protection measures in place within the Park. Through its designation as a state-owned National Park, it is covered by a management plan that allows activities such as tourism, firewood collection, research, etc., to be carried out in zoned areas only. Ramsar site no. 1861.

