

Myanmar's Ayeyarwady River – a wetland of international importance:

Major study, launched on World Wetland Day, confirms outstanding conservation values and need for urgent protection

Water bird surveys carried out in the winters from 2017 to 2019 by Fauna & Flora International FFI in collaboration with the Department of Fisheries (DoF) and the foundation Manfred-Hermsen-Stiftung (MHS). According to Dr. Christoph Zöckler, lead author and senior ornithologist at the Manfred-Hermsen-Stiftung, 'the Ayeyarwady River is one of the last remaining wild, un-dammed rivers in Asia, still hosting on average of more than 33,000 water birds of over 80 species during the winter seasons. But many waterbirds have sharply declined due to habitat loss, gold panning, poaching and other threats. Urgent conservation measures are needed'. Most numerous species have been on average the Ruddy Shelduck (8116), Little Pratincole (6254) and the Spot-billed Duck (3723). Also Cattle Egret (3359), Pintail (2063) and Great Cormorant (1261) have been observed regularly in large numbers. The River is also home to some very rare and globally threatened water birds, such as the critically endangered White-bellied Heron and the endangered Pallas' Fish Eagle. The river sandbanks provide nesting sites for the rare and globally endangered Black-bellied Tern as well as the 'vulnerable' River Tern. But many waterbirds have experienced a population decline.

Joost van der Ven, who sadly just passed away earlier this year, was one of the first ornithologist in modern times to survey the bird life of the Ayeyarwaddy River. The results of his surveys from 2001 to 2003 together with other Myanmar and international colleagues was published in Myanmar's first comprehensive Wetland Inventory (2004).

Using similar methodologies 15 years later along the Ayeyarwady River from Myitkyina to Bagan, 'it is worrying to see that several species of ducks have disappeared' reflects co-author Ngwe Lwin from FFI.

Despite the observed declines, globally important bird population remain high over the 1% flyway population size, one important indicator for the designation of the river as Ramsar site (e.g., Ruddy Shelduck 11%, Little Pratincole 8.8% and Spot-billed Duck 3%), which justifies the designation of this river section as globally important wetland under international protection of the Ramsar convention.

'Riverbanks are covered in household waste, sandbank are being dug up for gold-mining', says Frank Momberg FFI's Director of Program Development. 'Unless immediate drastic

measures are being undertaken to reduce the threats at least in the most important river sections, habitats for the water birds will disappear and the river turn into waste land instead’.

‘Special Community Conservation Areas (CCA) and Fish Conservation Zones (FCZ) shall be proposed and developed with local communities to protect key bird species, fish and dolphins’ emphases Zau Lunn, FFI’s Fish expert and wetland ecologist. CCAs and FCZs recognize the important role that local communities can play to protect wetlands, which play a critical role for local livelihoods. Community-managed conservation areas can be embedded in a Ramsar site cluster that protects the wetlands of the most important river sections, while an international recognition of overall river landscape as a UNESCO Biosphere would provide a framework to highlight sustainable development interventions to mitigate the threats.

Myanmar’s Forest Department, who has pioneered the designation of Community Conservation Areas and Ramsar site, recognizes that a combination of local and international designations can provide the level of protection and co-management necessary to escape a vicious cycle of ecological and economic damage, while the Biosphere framework would provide a unique opportunity for local stakeholders to integrate conservation and sustainable development, and for local communities to develop models for the wise use of wetlands.

Reference:

Zöckler, C., Ngwe Lwin, Thant Zin Tun, S. Pfützke, F. Momberg, J. van der Ven and S. Delany (2020). Surveys of riverine birds along the Ayeyarwady River in 2017-2019 and conservation implications. *Forktail* **36**:1-15

Annex 1: Photos

The Ayeyarwady River is one of the large remaining rivers in the world that is not affected by dams or any other regulation in the water course, leaving it as one of the last wild rivers, transporting water, sediment and nutrients unobstructed and creating large areas of wild places for biodiversity.



The river dynamic creating wild places and habitat for wildlife (C. Zöckler)

However, the human impact is visible and increasing. The serious decline of waterbirds and other birds is associated with the loss of habitats, mostly due to expansion of agricultural land on behalf of sandbanks and riverine swamps and other wetlands, but also widespread gold panning. Bird trapping and bait poisoning has been observed throughout the river and seems to be systemic and widespread.



Gold panning activities leave little space for breeding pratincoles (C. Zöckler)



Gravel mining destroys the breeding habitat (Ngwe Lwin, FFI 2017)

The overall still good numbers of waterbirds and rich biodiversity still warrants the area as very important and able to recover from previous losses if conservation actions are taken. Some sections still qualify as Ramsar sites, but a Man & Biosphere Reserve seems to be the most appropriate future conservation form to conserve the key biodiversity areas as well as the livelihoods of the communities along the River.



One of over 50 Black Storks on the river banks (C. Zöckler)



Small Pratincole, characteristic bird of the Ayeyarwady River (C. Zöckler)



Exceptionally, one male Mandarin Duck near Mandalay (C. Zöckler 2017)