

# BAY WATCH

## North Manila Bay, Philippines



The Philippine mangrove ecosystem © Dan Lundberg / Flickr

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**etro Manila, the capital of the Philippines, is among South-East Asia's largest urban sprawls and one of the region's most densely populated areas.** However, few

people – including many of the city's residents – are aware of the rich expanses of intertidal wetlands that stretch from Manila's northern coast to the provinces at the north fringe of the bay.

Flushed with nutrients swept down the fertile Pampanga and other rivers, there are areas of rich intertidal mudflats, estuarine lagoons, sand bars and mangrove forests. These productive wetlands draw some of the largest congregations of migratory waterbirds in South-East Asia along the East Asian-Australasian Flyway.

Experts have long recognised the ecological value of wetlands in North Manila Bay, which is considered an Important Bird and Biodiversity Area and Key Biodiversity Area. A majority of the waterbirds known from the Philippines, more than 90 species, visit the area. Studies show that at least six sites meet the Ramsar criteria for wetlands of international importance, holding large congregations of waterbirds (more than 20,000 individuals), including nine globally threatened species, and 15 populations that occur with more than 1 per cent of the East Asian-Australasian Flyway's population.

The coastal flats, salt pans and ponds in the provinces of Bulacan, Pampanga and Bataan are where large flocks of egrets, shorebirds, gulls and terns gather each year. Among these is the globally threatened Chinese Egret (classified as Vulnerable to extinction), which visits annually from Korea and eastern China. Manila Bay's coastal wetlands are also used by flocks of threatened waterbirds including Great Knot and Far Eastern Curlew (both Endangered) and Philippine Duck (Vulnerable), a striking species endemic to the Philippine archipelago.

While Manila Bay holds the largest remaining areas of

coastal wetlands in the Philippines, all is not well. These vital sites increasingly risk getting swallowed up by the city's relentless expansion, as well as the intensification of aquaculture.

Much natural wetland habitat has already been converted to fishponds to feed the country's growing demand for fish, with experts estimating that 99 per cent used to be mangrove forest. What little that remains is under immense pressure from reclamation and development, or is impacted by coastal pollution. Remnant areas of mudflats measuring only about 1,000 hectares are being planted into mangroves.

Today, protected areas cover just 1 per cent of Manila Bay, while the ongoing construction of a new airport impacts a large area of the remaining mangroves and mudflats in the north of the bay in Bulacan Province. Manila Bay's capacity to provide vital ecosystem services for the city's population has also been compromised. Studies show that coastal mangrove forests in South-East Asia store large quantities of carbon, in some instances up to five times as much as other forest types.

Coastal wetlands also play a role in protecting coastlines, shielding local communities from high tides and storm surges caused by the severe tropical depressions that hit the Philippines each year. Mangroves also help sustain the fisheries on which millions of people living along the bay depend.

Some hope for the future can be found in the Manila Bay Sustainable Development Masterplan, which offers recommendations on future development and follow-up actions to protect and restore the bay's fast dwindling wetlands. It has yet to be approved by the national government, and as key areas of wetlands are converted into a new airport and other coastal projects, there is a narrowing window of opportunity for stakeholders to secure this fantastic but under-appreciated ecosystem for its benefits to people and biodiversity. ■





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## CHINESE EGRET

*EGRETTA EULOPHOTES*

North Manila Bay is a vital wintering site for this majestic bird, which relies on estuaries, mudflats and coastlines to survive. During the 19th century, it was hunted excessively for its plumes, including its luxurious crest, which can reach over 11 centimetres during the breeding season. Today, the greatest threat is land reclamation for development, industry and agriculture.



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## PHILIPPINE DUCK

*ANAS LUZONICA*

Known locally as *Papan*, this large, striking duck feeds on fish, shrimp, insects and young vegetation, preferring to 'dabble' with its beak on the surface of the water rather than diving. The species is now classed as Vulnerable to extinction due to rapid population declines resulting from habitat loss and over-hunting. In the late 1980s, thousands of birds were reportedly shot weekly.