PRESS RELEASE

New UN Report Finds Migratory Species Are Likely Among the Most Vulnerable to Plastic Pollution

Study confirms that plastic pollution is impacting land and freshwater species protected by the UN's Convention on Migratory Species in the Asia-Pacific Region

Bonn, 31 August 2021 – Migratory species are likely to be among the most vulnerable to plastic pollution according to a new study released today by the Secretariat of the UN's Convention on the Conservation of Migratory Species of Wild Animals (CMS). The study focused for the first time on the impacts that plastic pollution has on animals that live on land and in freshwater environments, in the Asia-Pacific region. The study included case studies on the Ganges and Mekong river basins, which together contribute an estimated 200,000 tons of plastic pollution to the Indian Ocean and the Pacific Ocean every year.

But not all plastic pollution reaches the oceans. The study found that species protected under CMS are impacted by plastic pollution in river ecosystems and on land, including freshwater species, land animals and birds.

Freshwater Species at Risk of Death by Entanglement and Ingestion

Air-breathing freshwater mammals are particularly at risk from plastic pollution. Entanglement in plastic waste can prevent them from reaching the surface, leading to drowning. With an estimated 3,500 individuals remaining in the wild, the Ganges River Dolphin was recently rated as the second most vulnerable species at risk of entanglement and negative effects from discarded fishing gear in the Ganges. In the Mekong, drowning because of entanglement in nets is the key threat to Irrawaddy Dolphins that are estimated to number less than 100 individuals. Both dolphin species are classified as Endangered on the IUCN Red List.

Another marine mammal protected by CMS in the Asia-Pacific region is the Dugong, which has been shown to become entangled in fishing nets and drown. Entanglement is the greatest threat, and it is likely to cause the highest number of Dugong deaths, including in river deltas. Ingestion of plastics has also contributed to Dugong deaths in India and Thailand.

Plastic pollution can also impact other migratory and resident species that live in freshwater environments including fish, through entanglement as well as through the ingestion of microplastics that can in turn impact species along the food web.

Terrestrial Mammals Likely to be Impacted by Plastic Pollution with more research needed

While most plastics are used and disposed of on land, most research on the impacts of plastic pollution has focused on marine ecosystems. Terrestrial environments are particularly under-represented in plastic pollution research globally. However, evidence indicates that plastic ingestion is likely to be adversely impacting a wide variety of animals on land.

Protected under CMS since the 13th Conference of the Parties in 2020, the **Asian Elephant** has been observed scavenging on rubbish dumps in Sri Lanka, and ingesting plastic in Thailand.

Birds are most Observed Species Interacting with Plastic Pollution

With nearly 500 species, **birds** represent over 80 per cent of the CMS-listed species in the Asia-Pacific region, and there is significant evidence for bird interaction with plastics. Migratory birds such as the **Black-faced Spoonbill** and the **Osprey** have been observed making nests out of plastics, using fishing lines and shipping debris, often resulting in the entanglement of their chicks.

Migratory seabirds, such as Black-footed Albatrosses and Laysan Albatrosses, appear to be particularly vulnerable to plastic ingestion. They may not distinguish floating plastic items from prey when flying over the ocean. Plastic debris may then accumulate in their gut or be passed to their offspring through regurgitation.

CMS Executive Secretary Amy Fraenkel said: “Since most plastic pollution is generated on land, it is unfortunately not surprising that it is impacting migratory and other animal species that live on land and in freshwater environments. Clearly, we have huge gaps in the scientific literature of the threats of plastic pollution on many CMS species. We need more research to better identify risks to these species, and take appropriate steps to address them.”

Discarded Fishing Gear, Kite Strings, Among the Major Threats

In the Mekong, discarded fishing gear poses a major threat, with entanglement a particularly widely reported problem. This is especially the case for aquatic species, but also for terrestrial and avian species which encounter these discarded materials on land. In addition to discarded fishing gear, kite strings are especially an issue for land birds, and have been estimated as the second most frequent source of plastic interaction.

Migratory Species are likely to be particularly Vulnerable to Plastic Pollution

The report found that migratory species are likely among the most vulnerable to plastic pollution. Migratory species will encounter a wider range of different environments including ones that are industrialized and highly polluted, leading to the possibility of higher exposure to plastics and associated contaminants.

Many of the CMS-listed species in the region are endangered. While plastic pollution is not the only threat to migratory species, it can cause harm including mortality of individuals, and poses an additional stressor that may impact the species’ survival.

“Actions to address this global issue have fallen far short of what is needed”, added Ms. Fraenkel. “The focus has thus far been on clean up in our oceans, but that is already too late in the process. We need to focus on solutions and prevention of plastic pollution upstream.”

Plastic pollution is a growing global problem. Global capacity to manage plastic pollution is not keeping pace with projected growth in the plastics market. According to a recent study in *Science*, by 2030, even with ambitious reduction measures, up to 53 million metric tons of plastics could enter aquatic ecosystems annually, and if no improved measures are taken, this figure could reach 90 million tons annually. This, combined with the longevity of plastics, means that global environmental contamination is likely to continue to increase dramatically for some years to come.

“Bringing the science closer to policy-making is our shared mission” said Dechen Tsering, UN Environment Programme’s Regional Director for Asia and the Pacific, whose office is leading the project CounterMEASURE with the aim to understand how the plastic pollution problem affects rivers.

Of concern is that the long-term implications for organisms, ecosystems, the food web and human health are as yet unclear. Understanding the extent and drivers of negative effects on organisms and ecosystems because of plastic exposure and ingestion should be a research priority, given the ubiquity of plastics.

The report included several recommendations for the next steps:

- Reduce plastic waste and prevent plastic from reaching the environment;
- More effective product design, waste management and recycling;
- Include the reduction of plastic pollution in conservation measures for migratory species;
- More research and attention to land and freshwater impacts;
- Education campaigns and programs to raise awareness among citizens;
- Coordinated action and collaboration between local communities, academics, industry, governments, and NGOs to address the issue.

Notes for Editors

Parties to CMS called for further research on freshwater and terrestrial species at the 13th Meeting of the Conference of the Parties to CMS in 2020.

This report was prepared for the CMS Secretariat by the National Oceanography Centre, UK. The study was part of the CounterMEASURE project, funded by the Government of Japan and managed by the United Nations Environment Programme (UNEP). The project is aimed at identifying sources and pathways of plastic pollution in river systems in Asia. Its first phase helped fill knowledge gaps on the origins of plastic pollution in Asian rivers. In the second phase, the project is turning its attention to the impacts of plastic pollution – particularly on wildlife.

Link to the Report:

Impacts of Plastic Pollution on Freshwater Aquatic, Terrestrial and Avian Migratory Species in the Asia and Pacific Region

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About the Convention on Migratory Species (CMS)
An environmental treaty of the United Nations, the Convention on the Conservation of Migratory Species of Wild Animals (CMS) provides a global platform for the conservation and sustainable use of migratory animals and their habitats. This unique treaty brings governments and wildlife experts together to address the conservation needs of terrestrial, aquatic, and avian migratory species and their habitats around the world. Since the Convention's entry into force in 1979, its membership has grown steadily to include 132 Parties from Africa, Central and South America, Asia, Europe and Oceania.
www.cms.int

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