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AUSTRALIA'S ICONIC PLATYPUS UNDER THREAT FROM CLIMATE CHANGE: STUDY

Relevant for: Environment | Topic: Biodiversity, Ecology, and Wildlife Related Issues

The world's first platypus twin puggles born in captivity are shown together for the first time during a full health check at Taronga Zoo's veterinary clinic in Sydney, on March 28, 2003. | Photo Credit: AFP

Australia's devastating drought, and other effects of climate change are pushing the iconic duck-billed platypus, a globally unique mammal, towards extinction, a study published on January 20 warned.

Platypuses were once considered widespread across the eastern Australian mainland and Tasmania, although not a lot is known about their distribution or abundance because of the species' secretive and nocturnal nature, according to the researchers from the University of New South Wales (UNSW) in Australia.

Researchers, who for the first time examined the risks of extinction for this intriguing animal, call for action to minimise the risk of the platypus vanishing due to habitat destruction, dams and weirs.

The study, published in the journal Biological Conservation, examined the potentially devastating combination of threats to platypus populations, including water resource development, land clearing, climate change and increasingly severe periods of drought.

Lead author Gilad Bino, a researcher at the UNSW Centre for Ecosystem Science, said action must be taken now to prevent the platypus from disappearing from our waterways.

"There is an urgent need for a national risk assessment for the platypus to assess its conservation status, evaluate risks and impacts, and prioritise management in order to minimise any risk of extinction," Bino said.

The platypus is the sole living representative of its family, and genus, though a number of related species appear in the fossil record.

It is one of the five extant species of monotremes, the only mammals that lay eggs instead of giving birth to live young.

The study estimated that under current climate conditions and due to land clearing and fragmentation by dams, platypus numbers almost halved.

This led to the extinction of local populations across about 40% of the species' range, reflecting ongoing declines since European colonisation, the researchers said.

Under predicted climate change, the losses forecast were far greater because of increases in extreme drought frequencies and duration, such as the current dry spell.

"These dangers further expose the platypus to even worse local extinctions with no capacity to repopulate areas," Bino added.

Documented declines and local extinctions of the platypus show a species facing considerable risks, while the International Union for Conservation of Nature (IUCN) recently downgraded the platypus' conservation status to "Near Threatened," the researchers said.

However, the platypus remains unlisted in most jurisdictions in Australia — except South Australia — where it is endangered.

Study co-author professor Richard Kingsford said it was unfortunate that platypuses lived in areas undergoing extensive human development that threatened their lives and long-term viability.

"These include dams that stop their movements, agriculture which can destroy their burrows, fishing gear and yabby traps which can drown them and invasive foxes which can kill them," Kingsford said.

Study co-author professor Brendan Wintle at The University of Melbourne said it was important that preventative measures were taken now.

"Even for a presumed 'safe' species such as the platypus, mitigating or even stopping threats, such as new dams, is likely to be more effective than waiting for the risk of extinction to increase and possible failure," Wintle said.

"We should learn from the peril facing the koala to understand what happens when we ignore the warning signs," he said.

Bino said the research paper added to the increasing body of evidence which showed that the platypus, like many other native Australian species, was on the path of extinction.

"There is urgent need to implement national conservation efforts for this unique mammal and other species by increasing monitoring, tracking trends, mitigating threats, and protecting and improving management of freshwater habitats," Bino said.

Heatwaves and floods which used to be ‘once-in-a-century’ events are becoming more regular occurrences, says an annual assessment of the Earth’s climate by the World Meteorological Organization