Cross-breeding threatens at-risk stork species: NUS

The conservation of the Milky Stork (Mycteria cinerea), an endangered wading bird native to South-east Asia, is threatened due to cross-breeding with its more common cousin, the Painted Stork (Mycteria leucocephala), researchers from the National University of Singapore (NUS) have discovered.

"Apart from habitat loss and fragmentation, extinction through hybridisation is one of the major threats to endangered species," said the research lead, Assistant Professor Frank Rheindt from the Department of Biological Sciences at the NUS Faculty of Science.

The research, which was conducted with Wildlife Reserves Singapore, was published in the journal Biological Conservation.

The scientists analysed tissue samples of 46 captive and wild storks, and their results showed significant genomic "contamination": More than half of the sampled storks were affected by "genetic infiltration" from the Painted Stork.

Although originating from a limited number of introduced Painted Storks, these hybrids were now an integral part of both the wild and captive Singapore and southern Peninsular Malaysia stork population, NUS said in the same statement.

The study was the first to provide an estimate on the population genomic status of the endangered Milky Stork in Singapore, and the findings could contribute to the design of effective solutions for conservation management of the globally at-risk species, said Prof Rheindt.

The team recommended identifying and isolating hybrid storks in bird parks, zoos and the wild locally from pure Milky Storks to prevent cross-breeding, and conducting thorough genetic analysis to ensure the purity of an individual stork in any planned breeding programme or release.

Other recommendations included removing hybrids from the wild and releasing genetically pure Milky Storks.