NUS-led team discovers 5 new bird species

Another five subspecies of birds also found – all on three remote Indonesian islands

Timothy Goh

A team led by a researcher from the National University of Singapore (NUS) has discovered five new species and five subspecies of birds from just three remote Indonesian islands.

The university has declared this a “quantum leap” in the field of avian discovery, which typically only sees five new species of birds discovered each year from various regions around the world.

The team’s leader, Associate Professor Frank Rheindt, an avian researcher from NUS’ Department of Biological Sciences, said: “Birds are the best-known animal group on earth. There are so many bats, rats and mice out there that are still getting discovered, but when you look at the discovery curve of birds... it’s not rising, it’s steady.”

The team’s research focused on three small groups of islands in the Indonesian archipelago: the Sula, Banggai and Togian groups – selected because they include deep-sea islands with surrounding waters more than 120m deep.

“Every time there’s an ice age, the global sea levels recede by up to 120m, so everything that’s shallower than 120m emerges as land,” said Prof Rheindt.

Previously separate islands then become connected, and their creatures spread out over the new land mass. When sea levels rose and separate islands form once again, these creatures are likely to be found across the different islands.

Deep-sea islands, on the other hand, remain isolated even when sea levels fall. It is thus more likely to find undiscovered endemic species on such islands.

Together with counterparts from the Indonesian Institute of Sciences, Prof Rheindt travelled to the island groups from November 2013 to January 2014, targeting specific islands that had previously been only briefly explored.

On the island of Talatau, they found three new species: the Talatau grasshopper-warbler; the Talatau myzomela and the Talatau leaf-warbler. Also identified were three subspecies, the Talatau snow-browed flycatcher, Talatau Island thornbill and Sula mountain leafbird.

The Poleng Entani and the Poleng leaf-warbler were two new species discovered on the island of Poleng, along with a new subspecies, the Banggai mountains leafbird.

Finally, the Togian jungle-flycatcher, a new subspecies, was found on Togian.

The next few years were spent analysing the team’s data, which a team from NUS helped with, until the findings were finally published in the journal Science, today.

The team’s discovery was bitter-sweet, however, as it observed that the islands had suffered from “rampant forest destruction” as a result of logging, forest fires and climate change.

“Urgent, long-lasting conservation action is needed for some of the new forms to survive longer than a couple of decades beyond their date of description,” said Prof Rheindt.

“It’s almost a shameful blight on humanity that we have charted the moon and gone to the depths of the ocean, but only know about 6 to 7.5 per cent of the species on the planet. The remainder are undescribed, perhaps some to go extinct without ever being known by us.”