

Lee Kong Chian Natural History Museum deputy head Rudolf Meier (left) and museum officer Ang Yuchen in front of a wall projection of the Biodiversity of Singapore Digital Reference Collection. Dr Ang is holding specimens of some of the fly species found in the database. ST PHOTO: LIM YAOHUI

# Pokedex of S'pore wildlife records over 10,000 species

Museum's online database also shows how flora, fauna interact

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It may look like a concrete jungle but Singapore still supports more than 10,000 species of wildlife.

Now it is possible to get acquainted with them from the comfort of your home.

An online database hosted by the National University of Singapore's Lee Kong Chian Natural History Museum has collated over 11,200 entries of plants, animals and fungi – all of them found in Singapore.

One of the researchers behind the project is museum officer Ang Yuchen who describes it as "a Pokedex for Singapore biodiversity" – referring to the list of characters caught by players of the virtual reality game *Pokemon Go*.

Dr Ang said: "The database is a response to a common Singaporean

query – Singapore got biodiversity meh?"

Most entries in the database – called Biodiversity of Singapore – provide at least a name and a photograph of each species. New species yet to be described and named, however, use specimen codes instead. Many of these specimens are in the museum, and are in the process of being described.

The database also tries to illustrate Singapore's web of life, showing how flora and fauna interact with each other. Users can click on an animal and find links to information on the plants or animals it feeds on – though work on the site is continuing and not all species have links in place yet.

For example, clicking on the profile of the blue-eared kingfisher shows that it feeds on the striated snakehead fish. Users can then click on the photo of the fish to learn more about it, such as whether it is native to Singapore and whether it is common here.

An average of about 50 species are uploaded onto the database each week, including new species that recently described, such as *Thinophilus singaporensis*, a predatory long-legged fly found in Singapore's swamp forests.

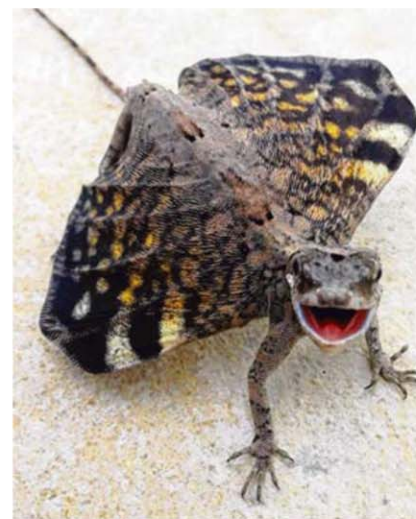
Many of the profiles also feature links to external sources, such as pages created by naturalist groups, students from the National University of Singapore's life sciences classes or the museum's Singapore Biodiversity Records – an online collection of "flora and fauna in Singapore, including sightings of uncommon or rare species".

Museum deputy head Rudolf Meier said the goal is to understand how different species interact to sustain Singapore's green spaces.

"Our green areas help to keep Singapore cool. They not only function



Animals found in Singapore include the collared kingfisher (*Todirhamphus chloris*; left) and the Sunda slow loris (*Nycticebus coucang*), a rare, secretive primate that hides in branches in the day and hunts for insects, birds, lizards and fruits at night. PHOTOS: CON FOLEY, MARCUS CHUA



Far left: The black-lined long-legged fly (*Thinophilus nigrolineatus*) is found only in Singapore's mangroves and preys on smaller insects.

Left: The common flying dragon (*Draco sumatranus*) likes perching on tree trunks and can spread its webbed ribs out like wings to glide from tree to tree. PHOTOS: KRISTY CHANG, ANG YUCHEN

as the air-conditioners of the country, but also as air and water purifiers," said Prof Meier.

"But to keep these areas healthy, we need to know about the players in them. Only by understanding these interactions can we keep our forests healthy."

Prof Meier estimates that there could be between 50,000 and 100,000 multicellular plant and animal species here. The database is managed by Prof Meier and Dr Ang, as well as researchers Jonathan Ho and Phan Shiyu. Prof Meier said the platform could help scientists and

researchers communicate new discoveries to the public, which in turn could help generate greater awareness and appreciation of Singapore's biodiversity.

Environmental studies undergraduate Shivaram Rasu, 24, said: "I dare say that a large number of Singaporeans still do not know about the incredible biodiversity contained in this small island. The existence of such a database online could help many learn more about the wildlife we share our home with at just the click of a mouse."

Mr Shivaram added that the links

to external websites, such as biodiversity records and blogs run by naturalists, were also useful in helping users make connections between wildlife and everyday happenings within our nation. "The links could show them that we are not as estranged from nature as some might think," he said.

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For more on the Pokedex of Singapore's wildlife, visit <https://singapore.biodiversity.online/>