The South Island kōkako, last officially sighted in 1967

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A bird in the hand

The rediscovery of lost bird species is inspiring, but what is it worth to science, wonders **Penny Sarchet**

IT WAS the first day of 2023 and John Mittermeier was feeling dispirited. He and his colleagues had been in Madagascar for 10 days searching for a bird last seen more than two decades ago. Long treks looking for its native forest habitat had revealed swathes of land cleared for agriculture and vanilla production. They had faced rain and leeches and Mittermeier had been ill much of the time. And, in two days, they would start heading home.

The team had just moved to a new location and Mittermeier had awoken full of hope, but he soon realised that the environment there was also degraded. "I went from a high of anticipation to 'this is a disaster'," he says. By 9 am he was walking back to camp. Then it happened. "Boom! There was a dusky tetraka."

This little green bird with its yellow throat and eye rings is so special that it makes the "most-wanted" list of the Search for Lost Birds. The initiative, launched in 2021, aims to use the excitement that elusive species inspire to direct the world's army of birdwatchers, researchers and conservationists to seek out avians lost to science. It even offers financial support for some searches.

Looking for long-lost species helps conservationists decide where their focus should be, says Christina Biggs at conservation organisation Re:wild. Finding them can bring hope. "We live in a time of apocalyptic climate-change fatigue," she says. Rediscovery stories can combat that. But how do you go about finding something that hasn't been seen in decades? And do remarkable finds like Mittermeier's really make any difference?

Nearly half of all bird species are in decline and one in eight are threatened with extinction. So, choosing which should take priority isn't easy. The Search for Lost Birds, a collaboration between Re:wild, American Bird Conservancy (ABC) and BirdLife International, focuses on "lost" species: ones with no captive population that haven't been verifiably documented for over a decade, but that aren't yet classified as extinct. There are around 140 of these. Compilers of the most-wanted list homed in on species that would benefit most from being found. To finalise their choices, they picked 10 birds from around the world, reflecting a diversity of species, that had last been seen in places safe and accessible enough to explore (see "The 10 most-wanted lost birds", page 48).

Hunting for such species sounds romantic, but perhaps not such a good conservation strategy. It seems logical to conclude that the longer a bird has gone unseen, the more likely it is to be extinct. Two species on the list – the Himalayan quail and the Siau scops-owl – have been missing for over a century. However, Mittermeier, who works for ABC, recently made another rediscovery of a bird that, although not on the most-wanted list, shows why even long-lost birds can't be written off.

The black-naped pheasant-pigeon, a native of Fergusson Island off eastern Papua New Guinea, hadn't been documented in 140 years. "There are not many birds that have been lost for a very long time and are not considered extinct," says Mittermeier. "It stood out as one of those that is critically endangered, but had not really received a lot of attention." He decided to try to find it. "How you look for a bird varies, depending on the bird," he says. In this case, it entailed putting together a team of experts from the US and Papua New Guinea, travelling to Fergusson and interviewing people living in remote areas. "This is a chicken-sized terrestrial bird," says Mittermeier. "It seemed like an obvious one to talk to people about."

"Rediscoveries like this highlight that the line between 'lost' and 'extinct' is blurry"

The islanders have a detailed knowledge of local natural history, but for three weeks the searchers encountered nobody who had seen the pheasant-pigeon or even heard of it. Then they met Augustine Gregory, a local who had spotted it several times and could also describe its call and gait. He took them to some rugged ridges and valleys within primary forest in the centre of the island where they spent several days searching. "We did not hear anything and started running out of food," says Mittermeier. Exhausted and with little time left, the team tried to come to terms with having spent weeks looking, only to find nothing. "Then we picked up our camera traps," he says. Astoundingly, they hadn't just found the black-naped pheasant-pigeon, they had captured video of it. In November 2022, the bird-watching realms of the internet were overjoyed at the news.

Rediscoveries like this highlight that the line between "lost" and "extinct" is blurry. The International Union for Conservation of Nature defines a species as "presumed extinct" when exhaustive surveys in its expected habitat have failed to record an individual. "That's nebulous," says Biggs. "What's an exhaustive search?" Nevertheless, there is conservation value in declaring a species extinct. "We all want to be hopeful that these things are alive," she says. "But if you don't make the call when it's not there, you're putting resources into something that could ›

“Is this focus on just a few species a good idea with so many birds in trouble?”

be used where there is a critically endangered animal that could still be saved.”

That is what has happened in the case of the ivory-billed woodpecker, argue Jeff Troy at Temple College, Texas, and Clark Jones, a birder affiliated with Colorado State University Pueblo. This iconic bird was last officially sighted in the US in 1944. Then, in 2005, hope that it still survives was rekindled when researchers released video footage taken in Arkansas. Although other researchers subsequently threw doubt on this footage, Troy and Jones have calculated that over 578,000 hours were subsequently spent looking for the bird and that more than $20.3 million in federal and state funding was spent on the woodpecker. They argue that all this money and effort could have been better used on other threatened and endangered species. Thrilled as they would be to see the ivory-billed woodpecker rediscovered, they agree with the US Fish and Wildlife Service, which proposed in 2021 that it should be declared extinct.

This dilemma is felt keenly by conservationists in New Zealand looking for the South Island kōkako, which is on the most-wanted list of the Search for Lost Birds. Like many of the country’s birds, it suffered great losses after the introduction of cats, rats and stoats. The last accepted sighting of this dark bird with an orange face wattle, or skin flap, was in 1967. It was declared extinct in 2007 but, after a sighting that same year, it was reclassified as “data deficient”. In 2010, the South Island Kōkako Charitable Trust was set up to collect more data. The trust has been searching for the species ever since. But, says trust manager Inger Perkins, every year at the AGM they ask themselves: “Do we still need to do this? Is there still value in us putting this effort in?”

There have been hints it still exists. In 2017, the trust launched a campaign, asking anyone going deep into backcountry areas to look for the bird and report sightings. “After that, we started getting heaps of reports,” says Perkins. But no one has yet won the NZ$10,000 the trust is offering for evidence of its existence. This year could see the final push, with Re:wild funding a search of key areas in the north-west of the island. “It’s going to be more recorders, more cameras, more hands on the ground – almost like a police search across the hillside where there’s been a murder,” says Perkins.

That might sound extreme, but a well-chosen search strategy can make the difference between success and failure, as the story of the hunt for the dusky tetraka testifies. In late 2022, Mittermeier headed to Madagascar to team up with Lily-Arison Réné de Roland, a local conservationist at The Peregrine Fund with an impressive track record of finding rare birds, including rediscovering the Madagascar pochard, a reddish-brown duck. The dusky tetraka is a warbler-like bird, hard to distinguish from similar species. So Réné de Roland decided the right way to find it was mist-netting – hanging fine mesh between trees to catch birds without injuring them. The disadvantage of this is that it only allows you to search a small area.

In December, the team members set out for the rainforest of northern Madagascar, the place where the last definitive record of the dusky tetraka had been collected in 1999. After more than 40 hours driving and a 5-hour walk, they finally reached its last known location only to find that the land had been cleared, despite being within a protected area. Nevertheless, they set up nets in nearby forest and waited. After five unsuccessful days, they decided they were catching the wrong kinds of birds – species you wouldn’t expect to find in the same place as the dusky tetraka – so they enlisted the help of local people to seek a more promising site. Then, with only a few days of the expedition left, the researchers moved to forest at lower altitude.

JOHN C. MITTERMEIER

A team including conservationists at The Peregrine Fund (above) rediscovered the dusky tetraka (above left) near a river in Madagascar (left)

The 10 most-wanted lost birds

Dusky tetraka
Missing since: 1999
Last known location: Madagascar
Status: Found

South Island kōkako
Missing since: 2007
Last known location: New Zealand
Status: Not yet found

Jerdon’s courser
Missing since: 2009
Last known location: India
Status: Not yet found

Itombwe nightjar
Missing since: 1955
Last known location: Democratic Republic of the Congo
Status: Not yet found

Cuban kite
Missing since: 2010
Last known location: Cuba
Status: Not yet found

Negros fruit-dove
Missing since: 1953
Last known location: Philippines
Status: Not yet found

Santa Marta sabrewing
Missing since: 2010
Last known location: Colombia
Status: Found

Vilcabamba brushfinch
Missing since: 1968
Last known location: Peru
Status: Not yet found

Himalayan quail
Missing since: 1877
Last known location: India
Status: Not yet found

Siau scops-owl
Missing since: 1866
Last known location: Indonesia
Status: Not yet found

Excitement and panic

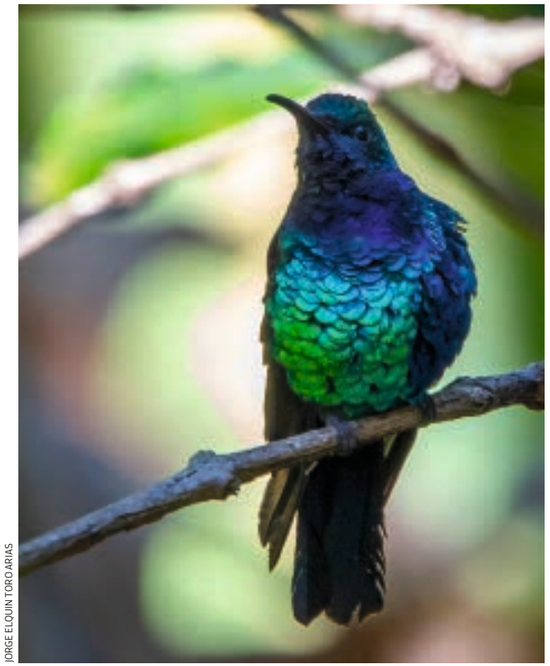
When Mittermeier spotted a pair of birds in undergrowth there, he knew right away they were dusky tetraka. He describes experiencing 2 minutes of excitement and panic before they were gone. “All of a sudden, you’re back to where you were before,” he says. Without proper documentation, such as photos, sound recordings or a specimen, a species remains officially lost. This is where Réné de Roland’s strategy paid off. The following day, the team found a dusky tetraka in the mist nets and was able to measure and photograph it. What’s more, the observations were confirmed by a partner team searching in eastern Madagascar that had also managed to catch one.

The rediscovery of a lost bird is a cause for celebration. But that’s just the first step, says Esteban Botero-Delgadillo at the Colombian conservation organisation SELVA. In 2022, he was involved in announcing the rediscovery of another bird on the most-wanted list, a tiny, emerald green hummingbird called the Santa Marta sabrewing. Many lost birds are poorly understood so, when found again, they must be studied to get the information needed to protect the species. “Once we understand it, then we will have a better view of its current status and threats, and then you can efficiently invest resources for conservation,” says Botero-Delgadillo. To that end, he and his colleagues are now studying this bird in the wild, not least to find out whether it migrates to the highest part of Colombia’s Santa Marta mountains to breed, as previously suggested. Meanwhile, in Madagascar, Réné de Roland hopes the rediscovery of the dusky tetraka will bring funding to train members of local associations that manage the protected sites it inhabits.

Even with these successes, there is still the question of whether this kind of focus on just a few species is a good idea when so many birds are in trouble. Mittermeier argues that looking for the right lost species, in the right way, is a cost-effective approach for meaningful conservation. Searches require about $5000 to $10,000, he says. “I think most people would agree that’s a small investment when it could basically be the difference in whether or not a species goes extinct.”

Besides, the Search for Lost Birds specifically selected species in under-studied locations where any new data that is collected could help fill knowledge gaps. Briggs believes this can pay dividends, pointing to an unsuccessful 2021 search for the Sinú parakeet, a Colombian bird missing since 1949, that recorded 30 bird species not officially seen before in the Córdoba area. James Eaton, an expert on Indonesian birds, reaped similar rewards when he and his team went looking for the Siau scops-owl. Although they didn’t find it, their expedition shed new light on the ecology of the tiny Indonesian island of Siau. “We were able to survey for other species,” he says. “The endangered Siau pitta, a bird only found on Siau and its satellites, was much more numerous than expected. So some good has come out of it.” Biggs goes even further. “There’s absolutely no failure in searching because some scientific knowledge always emerges,” she says.

Less than 18 months after the launch of the Search for Lost Birds, two species on its most-wanted list have been found, the black-naped pheasant pigeon has been rediscovered after 140 years and birdwatchers are waiting eagerly for further news from ongoing searches, including the hunt for the South Island kōkako. As for Mittermeier, he isn’t finished yet. In June he will be returning to the Solomon Islands to continue seeking the Makira moorhen, a bird last recorded in 1953. Very little is known about the species, but it is thought to be flightless with striking blue feathers. There is just one warning for those seeking the thrill of its rediscovery. “It’s so cool,” says Mittermeier, “that the scientist who first saw it nearly fainted in excitement.” ▮



JORGE ELQUIN TORO ARIAS

The Santa Marta sabrewing was rediscovered in Colombia in 2022

Penny Sarchet is the news and digital director at *New Scientist*