

The Edwards's Pheasant, a Vietnam endemic, has been all but wiped out in the wild in the aftermath of the war that once ravaged the land. But a prospering caged community brings hope that it could once again come home to roost

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ramed by mounds of white tuft, the ruddy faces of the Red-shanked Douc monkeys peer out from the forest canopies. In the distance, calls of White-cheeked Gibbons echo through the early morning stillness. Underneath, browsing in the shadows of the forest floor are myriad species of deer; among them forages one of the world's rarest large mammals – the Saola, a bovine that lives in forests so wild and remote, that they were unknown to humans until researchers happened upon the remains of one during an expedition in 1992.

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That is a measure of how deep into the wilderness we've had to come to get here. We're in Khe Nuoc Trong, an evergreen-broadleaf forest situated in the Annamese lowlands, Vietnam. It feels like you couldn't stretch your arms out to

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yawn without knocking three or four endangered species off their perch. The area is a jewel of biodiversity, but something's missing. A very important part of the forest's heritage, in fact. You could spend all morning listening out into the stillness without ever once hearing a guttural "uk-uk-uk-uk" call, which once rang loud and clear through the canopies. A call that belongs, or perhaps once belonged, to the Edwards's Pheasant *Lophura edwardsi* (Critically Endangered) – an endemic species that has not been seen in the wild since 2000.

This beautiful bird, whose males are iridescent blue with a flash of red on the face and a white crest, was little known in the wild even prior to its disapperance; it was said to love the dark shadows of ever-wet lowland forests. It was discovered in 1896 and was recorded by French ornithologists during the early 20th Century, but then went unrecorded for almost 60 years. Suddenly, in 1996, it was rediscovered, but almost as soon as it was found, it vanished again. Extensive surveying of its favoured haunts has found no trace of it since.

This is perhaps not surprising, the one thing we do know about Edwards's Pheasant is that it is a lowland rainforest specialist, and Vietnam's rainforests had a tough time during the 20th Century, to say the least. The centre of the species' historic range lay in Quang Tri province, the site of the demilitarised zone during the Vietnam War, and an area that suffered the fiercest fighting and the most aggressive use of herbicides. During the War, which raged from 1955 to the fall of Saigon in 1975, seventy-two million litres of herbicides, including the infamous Agent Orange, were sprayed on forests and fields by American troops to clear vegetation. The effects on the area's biodiversity, including the beleaguered Edwards's Pheasant, are easy to imagine.

Since the war, increasing human populations and their demand for land for agriculture have further reduced any habitat suitable for straggling Edwards's Pheasant populations. Some areas of forest, although they may look intact with trees regrown or replanted, may be devoid of animals because they have been intensively hunted for food or for illegal trade. As a result of all these factors, populations of Edwards's Pheasant have been reduced, fragmented and left fragile – if indeed there are any left at all. As the years roll by, it seems increasingly likely that snares set for bush-meat may have picked off the last individuals and although it's impossible to confirm for sure until every last patch of forest has been examined, the species could well be extinct in the wild.

However, there is good news, of a sort. Sometime in the 1920s, at least 14 Edwards's Pheasants were taken into captivity and sent to France. This small, exiled population has done well, and there are currently over 1,000 birds in collections across the world, including birds in Vietnam's own Hanoi Zoo. Some may not be purebred Edwards's (many are crossbred with Silver Pheasant Lophura nycthemera), but genetic analysis is currently underway to find the best genetic stock. The plan is to select the best and purest birds to breed viable offspring for future release to the wild - that means two or three generations of chicks raised by their own parents. It will take time - at least five to seven years - but if successful, these birds could be released back into the wild, to be the first of new populations of Edwards's Pheasant or to help the recovery of any remaining wild populations that may exist, undiscovered.

Of course, the wild must be ready to receive them. Currently efforts are being made to locate any remaining populations of Edwards's Pheasant in pockets of suitable habitat within larger blocks of forest. A range of measures will be implemented to restore and safeguard other potential pheasant habitats. One of the greatest threats to the success of a reintroduction programme would be hunting, so Viet Nature (BirdLife in Vietnam), together with their partners, are aiming to eradicate hunting at key sites such as Khe Nuoc Trong, Bac Huong Hoa, Đakrong, Phong Dien and Kể Gỗ Nature Reserve.

The first steps towards establishing an Edwards's Pheasant breeding programme have already been taken. With the support of local partners, Viet Nature will build a breeding station and environmental education centre on five hectares of land in Quang Binh province (outside any reserve for biosecurity reasons). The support of a technically qualified and interested partner is being sought to help fund and manage the new station when it is up and running.

Right now the Edwards's Pheasant ex-situ conservation community, including staff at Hanoi Zoo, and zoos and private breeders in Europe, are selecting the best birds for the breeding programme. Four birds were sent to Hanoi Zoo in 2015 to breed with descendants of the only wild male, caught in 1997. Viet Nature and Hanoi Zoo are collaborating on a plan to bring the first birds for the breeding station either from, or via, Hanoi Zoo. Establishing a viable breeding group of Edwards's Pheasant is just the first step. Release into the wild will take still more time, trial and error, and naturally not all the birds released will survive. But Viet Nature and their partners are in this for the long haul. Right now, in this Year of the Rooster, the first aviaries with a few pairs of Edwards's Pheasants will be built at the breeding station. They hope that by the next Year of the Rooster (2029) there will once again be sustainable populations of Edwards's Pheasant in the wild in its homeland.

At the core of this effort to return one species of bird to its natural home is the restoration of Vietnam's forests. Forests provide the basics of life, clean air and clean water and are a buffer against the threat of climate change. But for Vietnamese they are something more, they signify the survival of the unique beauty of Vietnamese landscapes and culture. What better symbol of that survival than a beautiful bird, its feathers flashing in the dappled light, rejoicing in the life-giving rain, once again piercing the silence with an "uk-uk-uk".



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