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forest wonders

Michael Chan/www.flickr.com/photos/ahsup



Manú National Park, *Peru*

Hartmut Jungius/WWF-Canon



Founded in 1961 with the help of WWF, Manú is probably the richest protected area on Earth: just 1 hectare of its pristine rainforest has been found to contain more than 200 tree species. And its unique altitude range – from 365 to 4,000 metres above sea level – accommodates at least 14 types of forest, including cloud forest, montane rainforest and lowland tropical rainforest. Most of its species have yet to be discovered, but so far 800 species of birds and 200 of mammals have been identified, including the rare giant otter and giant armadillo. The Incas once lived here, and now four known indigenous peoples make it their home.

Styx Forest, *Tasmania*

Martin Wyness/Still Pictures



In ancient mythology the Styx river wound nine times around the underworld. Environmentalists fear that its namesake in Tasmania – one of 13 rivers around the world called after the Greek word for hate – may one day run through similarly lifeless territory because the pristine forest that surrounds it is being chewed up for woodchips and paper. Yet it is home to the world's tallest hardwood tree, *Eucalyptus regnans* ('king of the gums'), which can live more than 400 years and grow to over 90 metres high; only California's giant redwood (a softwood) is bigger. Less than 13 per cent of the stands of the giant gum remain, and up to 600 hectares of the Styx forest are being logged every year.

Bialowieza Forest, *Belarus/Poland*

Adrian Arbib/Still Pictures



Once the hunting preserve of Polish kings, the ancient Bialowieza forest – straddling the Belarus/Poland border – is the last stretch of primeval temperate forest in Europe's lowlands. About half of its 10,500 hectares are a nature reserve, with one of the richest arrays of wildlife on the continent. Its most famous residents are several hundred wisent, or European bison, which became extinct in Poland in 1919 but were reintroduced to the wild 10 years later after being bred in captivity. In all, it has 11,500 animal species – including 250 birds and 54 mammals, more than 3,000 species of fungi, and 5,000 plant species, including 200 mosses and 277 lichens, many of which grow only in primeval forests.

Bwindi Impenetrable Forest, *Uganda*

J. E. Cozart/UNEP/Topham



Not for nothing is the large primeval forest in southwestern Uganda called 'impenetrable'. Its dense undergrowth of vines, shrubs and herbs makes it nearly impossible to get through – unless you are a mountain gorilla, that is, for it is here that half the world's population of the endangered species lives. Ranging from 1,200 to 2,600 metres up on the western edge of the Rift Valley, the forest includes both lowland and mountain plants, making it one of Earth's most biologically diverse areas. It is home to at least 120 mammal species, 350 species of birds, 200 butterflies, and over 100 ferns, while its 200 tree species include 12 found nowhere else in the world.

Virgin Komi Forest, *Russian Federation*

Doris Wiese/UNEP/Topham



Cold and forbidding, the conifer forest stretches along 500 kilometres of tundra on the European side of the Ural mountain range, which separates the continent from Asia. The Virgin Komi is huge, the largest area of primeval forest in Europe, covering around 33,000 square kilometres – a tract larger than Belgium. It became Russia's first World Heritage Site in 1995, saving it from massive felling for timber. Part of the forest is also protected as a federal biosphere reserve, but it is still under threat from gold mining and illegal logging, while its large mammals – which include brown bear and elk – remain tempting prey for poachers.

Jiuzhaigou Valley, *China*

Michael Chan/www.flickr.com/photos/ahsup



Blue-green lakes and spectacular waterfalls punctuate the high mountains and narrow valleys of this nature reserve. They are set amid 72,000 hectares of cloud forest, montane mixed forest, and subalpine vegetation. Two of China's most famous endangered species live here: the golden snub-nosed monkey and the giant panda. But it is becoming a victim of its own beauty. Some 7,000 tourists per day are ready to undergo a gruelling 10-hour bus ride to visit it. The numbers are expected to soar as transport improves and more hotels are built, increasing threats from pollution, erosion and poor development, while the forest is also felled for agriculture and firewood.

Coast Redwood Forest, *California*

Christian Sliana/UNEP/Topham



Dinosaurs once lumbered among giant coast redwoods (*Sequoia semperviren*), living fossils from 160 million years ago, and still the world's tallest trees. From a seed no bigger than one in a tomato, they can grow 122 metres tall (about as high as a 35-storey skyscraper) with trunks up to 7 metres in diameter. They may live for over 2,000 years in the cool, damp climate of northern California and southern Oregon, partly because they can clone themselves from stumps or roots. They resist fire, insects and disease, which makes their wood particularly valuable for building material, but this has contributed to their downfall: up to 95 per cent of the original forest has been logged.