migration to certain reserves in the 1970s associated with establishment of exotic timber plantations on land cleared of natural forest. A small area in the Omo Forest Reserve (4.6 km²) was designated a Strict Nature Reserve in 1946 and parts of the Reserve were declared a UNESCO Man and the Biosphere Reserve in 1977. Despite these designations, Omo and the adjacent forest reserves of south-west Nigeria remain subject to uncontrolled logging, clearance for farms and plantations, and hunting of wildlife.

All the aforementioned species are threatened by the loss of habitat as forests are cleared and fragmented by farming. Moreover, even where forest remains, it continues to be degraded by the removal of timber or clearance of understorey, vegetation for planting shade-tolerant crops, such as cocoa. Hunting, most commonly for bushmeat but also for the commercial trade in illegal wildlife products and in retaliation for crop-raiding, is also a major threat.

The concept of legally protecting and coordinating the management of the remaining natural forest within the Omo, Shasha and Oluwa Forest Reserves was proposed in a management plan in 2011 by the Omo–Shasha–Oluwa Forest Initiative. The Initiative comprises the Nigerian Conservation Foundation, Whitley Wildlife Conservation Trust, and Forestry Research Institute of Nigeria in partnership with the state governments of Ogun, Osun and Ondo and with the support of the A.P. Leventis Ornithological Research Institute, Nigeria, and Environmental Resource Management, UK.

The management plan developed by the Initiative identified specific logging compartments for designation as a wildlife sanctuary in which further logging, farming and hunting would be prohibited. Progress towards this goal was reinvigorated with the first meeting of the Omo–Shasha–Oluwa Forest Initiative steering committee in August 2016 and a subsequent meeting with state government representatives in October 2016, in Lagos. This formal coordination of conservation efforts and engagement with state governments, together with recent species records, including the camera-trap photographs of chimpanzees in Omo, provide hope that it is not too late to protect these important forests and their distinctive wildlife.

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A new programme for conservation of Plant Species with Extremely Small Populations in south-west China

Plant Species with Extremely Small Populations, a conservation concept developed in China in 2005, are characterized by small remaining populations (lower than the minimum viable population), a restricted habitat, a high risk of extinction, and exposure to a high level of disturbance. A species with fewer than 5,000 mature individuals in the wild and fewer than 500 in each isolated population (except when only one population is known) qualifies for designation under Plant Species with Extremely Small Populations. The identification of a high level of disturbance and irreversible habitat destruction distinguishes Plant Species with Extremely Small Populations from naturally rare species. In 2012 China's State Forestry Administration issued the national Implementation Plan for Rescuing and Conserving China's Plant Species with Extremely Small Populations, listing 120 plant species. Province-level conservation plans and lists followed.

To promote the conservation of Plant Species with Extremely Small Populations, the Ministry of Science and Technology granted funding for a National Key Programme: Survey and Germplasm Conservation of Plant Species with Extremely Small Populations in South-west China (grant number: 2017FY100100). The programme started in February 2017 and will last for 5 years, with funding of RMB 24.26 million (USD 3.52 million). Kunming Institute of Botany, of the Chinese Academy of Sciences, is leading this programme, with the participation of 13 other organizations.

The programme will include extensive field surveys of 231 species, including national- and province-level lists of Plant Species with Extremely Small Populations, in south-west China, where the geographical features are diverse and mountainous. The Mountains of South-west China biodiversity hotspot lies within this region. The survey area comprises 1.46 million km², and includes Yunnan, Guizhou, Sichuan, Chongqing, west Guangxi, and south-east Xizang Provinces. Although this is only 15% of China's land area, it includes more than 60% of China's flora and threatened plant species.

One requirement of the programme is that at least 70 species will be propagated and conserved ex situ in botanical

gardens, and that the germplasm of at least 100 species will be collected and conserved in the Germplasm Bank of Wild Species at Kunming Institute of Botany. A database will be developed to collect and store survey information, and after the completion of the programme these data will be shared on the National Infrastructure Platform of Science and Technology, to support conservation and research. In addition, a germplasm collecting and conserving standard for Plant Species with Extremely Small Populations will be developed. It is anticipated that this programme will not only help to conserve the target species, but will also help to improve scientific research and investigations of the economic values of these plants.

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Poland: Central European large river ecosystems under unprecedented threat

In 2016 the government of Poland adopted a development strategy for inland waterways, to adapt the country's rivers to the criteria of international standards for inland waterways, corresponding to at least navigability class IV. The Act relating to Poland's ratification of the European Agreement on Main Inland Waterways of International Importance came into force on 15 February 2017. The Act, even if only partially implemented, will pose a grave threat to the largest Central European rivers. The strategy's main aims include modifying river beds, drainage, dredging, and the construction of dams, reservoirs, levees and riverside revetments along the lengths of Poland's longest rivers. The strategy is only viable if the main rivers are converted into a series of canals by the construction of barrages. This would have a dramatic impact on pan-European environmental corridors and river ecosystems in Germany, the Czech Republic, Ukraine and Belarus.

Implementing the strategy in the Oder valley would undermine the integrity of the entire chain of protected areas along this river, including 17 Natura 2000 sites from the Czech border to the Baltic Sea. A preliminary analysis carried out by a team of scientists and NGO experts, led by the Naturalists' Club (www.kp.org.pl/pdf/stanowiska/wodne/2016-09_Risk_influence_inl_waterways_develop_on_nature.pdf), indicates that the project threatens some of the most valuable rivers in Europe, including associated riparian, ash–elm–oak forest, and large numbers of nesting and foraging sites of threatened species such as the white-tailed eagle *Haliaeetus albicilla*, black kite *Milvus migrans*, red kite *Milvus milvus*, black tern *Chlidonias niger*, corn crake *Crex crex*, middle spotted woodpecker *Dendrocopos medius* and others protected by the EU's Habitats and Birds Directives. Most of the unique oxbow ecosystem together with its plants and animals would disappear, including many localities of the floating water-plantain *Luronium natans*, northern crested newt *Triturus cristatus*, European fire-bellied toad *Bombina bombina*, yellow-bellied toad *Bombina variegata*, Eurasian otter *Lutra lutra* and Eurasian beaver *Castor fiber*. The estimated cost of the works on the 742 km of the Oder alone is USD 7.1 billion during the next 15 years.

In the Vistula valley the integrity of the 10 Natura 2000 areas and 10 nature reserves between Warsaw and the Baltic Sea would be damaged. Habitats for rare species of birds (e.g. the largest Polish breeding populations of common ringed plover *Charadrius hiaticula*, common gull *Larus canus*, sandwich tern *Sterna sandvicensis*, common tern *Sterna hirundo* and little tern *Sternula albifrons*) would be destroyed, as would sandbanks, the sole resting sites of the grey seal *Halichoerus grypus* in Poland. Barrage construction on both the Vistula and Oder would hamper the migration of diadromous fish, reducing access to their spawning grounds.

Important aspects of the strategy are canal connections with the Dniester and Danube basins. These would threaten Europe's freshwater ecosystems by facilitating migration of alien plant and animal species between basins.

The Polish government's strategy appears to contradict EU law, and contravenes the Habitats and Birds Directive and the Water Framework Directive. Nevertheless, some aspects of this strategy are to be financed by the European Investment Bank (part of the so-called Juncker Plan) and are being considered by the World Bank. The European Commission is, however, investigating whether the strategy's environmental impact has been properly assessed. In response to the threat posed by the strategy, more than 20 NGOs (including WWF Poland and BirdLife Poland) have formed a coalition under the name Koalicja Ratujmy Rzeki! (Save the rivers!; www.kp.org.pl/index.php?option=com_content&task=view&id=1173&Itemid=353).

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