



species that were extinct in the wild, including the majestic Osprey, have been re-introduced, and are flourishing. While there are many such conservation success stories, the overall picture is bleak.

The IUCN Red List of Threatened Species paints an ever-more alarming picture of the state of biodiversity on our planet. Of the almost 50,000 species assessed last year, more than 17,000 are threatened. The European Red List shows that 15% of mammals, nearly a quarter of amphibians, one fifth of reptiles, 9% of butterflies, 14% of dragonflies and 11% of saproxylic beetles (beetles that depend on decaying wood) are threatened with extinction in Europe.

As part of the species assessments, we have also identified the main threats to biodiversity, including over-exploitation, habitat loss and fragmentation, pollution, and the spread of invasive alien species. With increasing recognition of the vulnerability of our flora and fauna we now realise that climate change is an additional challenge for biodiversity.

Mitigation and adaptation

IUCN is urging the CBD's Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) that will meet in Nairobi in May 2010 to encourage all Parties to the CBD to recognise that mitigating climate change is a central component in their efforts to address biodiversity loss. Climate change mitigation and adaptation need to be fully integrated into the full range of CBD Programmes of Work.

Nature contributes to the mitigation of climate change, through sequestering and storing carbon and by enhancing carbon stocks in a range of ecosystems, including forests, peat lands and other wetlands. According to the 2008 Eliash Review, forests represent the most significant terrestrial carbon stock: they contain 77% of all carbon stored in vegetation, and 39% of all carbon stored in soils. Forests sequester and store more carbon per hectare than any other type of land cover.

According to an assessment carried out in 2009 by the World Resources Institute for the Global Partnership on Forest Landscape Restoration, there are an estimated 1 billion hectares of lost forests and degraded lands worldwide that offer potential for restoration at a mosaic and landscape scale. The estimated carbon sequestration potential of this area is 70-140 GtCO₂e up to 2030 – equivalent to or up to twice as much as from avoided deforestation. Clearly, the two strategies must go hand in hand.

The UNFCCC Copenhagen Accord that was agreed last year, but has not been ratified by all Parties, includes intent to establish a REDD-plus mechanism. REDD-plus goes beyond reducing emissions from deforestation and forest degradation to include forest conservation, sustainable management of forests and enhancement of forest carbon stocks. Ensuring that the UNFCCC Conference of Parties in Mexico in December this year adopts a decision on REDD-plus is one of the priority areas for IUCN's involvement in the UNFCCC process.

Along with contributing to mitigation, nature supports people to adapt to climate change through providing ecosystem services, such as soil nutrient-cycle and carbon sequestration. IUCN promotes the concept of ecosystem-based adaptation, which includes a range of local and landscape-scale strategies that enable both people and nature to adapt in the face of climate change. This includes the maintenance and restoration of "natural infrastructure" such as mangroves and watershed vegetation as a cost-effective means for reducing vulnerability to

storm surges and floods. A recent case study of managed re-alignment of the sea defences at Freiston Shore in the UK (a process that involves deliberately breaching sea-walls in order to allow the coast line to recede) illustrates that this is a viable alternative to engineered infrastructure.

Another strategy deals with connectivity of protected areas and ecological corridors in production landscapes, involving a full range of stakeholders and governance arrangements. The European Green Belt, stretching from the Barents Sea to the Black Sea, is the best European example of how to create ecological corridors.

The current text of the document on adaptation from the UNFCCC Ad-hoc Working Group on Long-term Cooperative Action makes reference to: “building resilience of socio-economic and ecological systems, including through economic diversification and sustainable management of natural resources”. IUCN will make every effort during the negotiations in 2010 to ensure that