



The Endangered Caspian seal *Pusa caspica*. Photo: Nataliya Shumeyko.

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A range-wide conservation action plan for the European bison

In 2004, the IUCN Species Survival Commission Bison Specialist Group published a *European Bison Status Survey and Conservation Action Plan* (Belousova et al., 2004, *IUCN/SSC Action Plans for the Conservation of Biological Diversity*, IUCN, Gland, Switzerland). By 2020, there were c. 6,800 European bison *Bison bonasus* in 47 free-ranging subpopulations across 10 countries, c. 500 in semi free-living conditions, and c. 1,700 in ex situ facilities. The 2020 IUCN Red List assessment (Plumb et al., 2020, *The IUCN Red List of Threatened Species 2020*, e.T2814A45156279) recategorized the species from Vulnerable to Near Threatened, with ongoing threats highlighted (low genetic diversity, small population size and habitat fragmentation). In early 2022, the Bison Specialist Group and European Bison Conservation Center will co-publish a strategic status review, as noted by Olech et al. (*Oryx*, 2019, 53, 214).

Progress has been made in improving knowledge about the species and in implementing actions that have increased its abundance and distribution, yet there is a diversity of viewpoints on what future success for the species might look like. Consequently, the Bison Specialist Group, European Association of Zoos and Aquaria, European Bison Conservation Center, Rewilding Europe, WWF, Tierpark Berlin, Humboldt University–Berlin, and Polish Academy of Sciences–Mammal Research Institute have agreed to collaborate on a European Bison Range-wide Conservation Action Plan, facilitated by the IUCN Species

Survival Commission Conservation Planning Specialist Group. The Plan will adopt the One Plan approach, which emphasises participation by a broad range of stakeholders and integrates in situ and ex situ population management activities into a coherent set of conservation strategies and actions.

The Plan will follow the Conservation Planning Specialist Group's Species Conservation Planning Principles and Steps (CPSG, 2020, *Species Conservation Planning Principles & Steps*. Version 1.0. IUCN SSC Conservation Planning Specialist Group, Apple Valley, USA), use the best available science and information to assess the prevailing circumstances, and recommend priority near-term actions (over 10 years) that advance the long-term strategic direction (over 100 years) towards recovery of the species within its historical range. The Plan will also consider how habitats outside the historical range could play a role in that recovery, considering possible future climatic and land-use changes that could influence the longer-term adaptability and resilience of the species. Key issues to be addressed include population viability through maintaining natural selection mechanisms; habitat availability and fragmentation; human–wildlife coexistence; metapopulation viability and management; genetics; integration of in situ and ex situ management; wildlife health; role of feeding, hunting and culling; climate change; policy and legislative consistency; captive breeding; and adaptive management. During 2022, the planning process will include stakeholder analyses, online and in-person workshops, and new population viability analyses. The Plan, to be published in 2023, will provide a scientifically rigorous strategic framework to inform subsequent additional national and sub-regional plans and actions that collectively will contribute to achieving range-wide goals for the European bison.

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Sea Turtle Conservancy dedicates new sea turtle field station in Parque Nacional Marino Isla Bastimentos, Panama

The Sea Turtle Conservancy (formerly Caribbean Conservation Corporation) has been active in sea turtle conservation throughout the greater Caribbean since the 1950s. On 7 November 2021, Peter and Anne Meylan, research associates of the Sea Turtle Conservancy and the Smithsonian Tropical Research Institute, Cristina Ordoñez and other members of the Sea Turtle Conservancy, along with a host of beach monitors and other community members, dedicated a new field station on the Small Zapatilla Cay in the Bastimentos Island National Marine Park, Bocas del Toro Province, Panama.

The Park is a key nesting area for the Critically Endangered hawksbill turtle *Eretmochelys imbricata*. This new facility will support ongoing efforts to conserve and restore the nesting beach population of hawksbill turtles that formerly existed along this coast. This population and others in Panama were nearly extirpated by the tortoiseshell trade that resulted in the loss of hundreds of thousands of hawksbill turtles (mostly nesting females) before Panama became a CITES signatory in 1978. The field station will serve as headquarters for beach monitors, mostly members of the Indigenous Ngäbe-Buglé community of Salt Creek, to continue daytime and night-time patrols that document nesting and productivity. The presence of monitors along with MiAmbiente (the environmental ministry of Panama) Park personnel has minimized the take of hawksbill females and nests from the Park and has led to a 10-fold increase in the number of nests deposited since 2003. Construction of the new field station was made possible by the cooperation of MiAmbiente, which has jurisdiction over protected areas and has played a key role in protecting the Park's resources, especially sea turtles. Bastimentos Island National Marine Park was one of the first national marine parks with sea turtle protection as one of its primary goals. The new station was funded by the U.S. Fish & Wildlife Service, the Coastal Wildlife Club of Florida, the Lemmon Foundation, and Only One. The building was dedicated to Chencho Castillo, a former Bocas turtle fisherman, who along with multiple family members has worked diligently to protect sea turtles in the Bocas region since 1987. The station was built on the site of his former camp on the Small Zapatilla Cay.

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The Critically Endangered dragonfly *Libellula angelina* is losing its habitat to urbanization in East Asia

The Critically Endangered dragonfly *Libellula angelina*, known as the bekko tombo, of central and northern China, Japan, western South Korea, and North Korea, was common before 1970 but has declined dramatically as a result of habitat loss caused by urbanization. In China, natural ponds and wetland parks have facilitated the survival of this species in megacities such as Beijing and Tianjin, but habitat degeneration in some cities appears to be resulting in further decline of the species.

The natural ponds around the Chentai Bridge in Beichen district, Tianjin, one of the historical habitats of the bekko tombo, suffered a severe drought from excessive pumping for irrigation in spring 2020, followed by excessive water

supplementation that increased the original water level in autumn 2020. In Tianjin Water Park, another habitat of the bekko tombo, sediment was dredged and reeds mowed, destroying habitat for the species' nymphs and imagoes, respectively, in 2020. During 15 April–15 May 2021, we surveyed for the bekko tombo in these two habitats on 18 occasions, concentrating on their preferred microhabitats in reeds and open grassland, but failed to find the species. Prior to this, the bekko tombo was commonly seen in these two areas in spring.

The prime habitat for the bekko tombo is unmodified, stable and organic-rich ponds with open water and moderate growth of emergent plants. Urbanization and habitat degradation, accompanied by reclamation, drought, contamination, sediment dredging, mowing of reeds and shrinkage of wetlands, are driving the collapse of the remaining populations of the bekko tombo. Measures are required to maintain the integrity of the species' habitat by protecting wetlands from urbanization and anthropogenic modification, with a halt to inappropriate dredging and mowing.

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First records of the West African torpedo in Cabo Verde Archipelago, eastern Atlantic

Torpedo rays are small to large electric rays with a depressed circular disc, short snout, and tail with two dorsal fins. Most are benthic species living on soft sand and mud. They occur worldwide, from cool temperate to tropical waters, in the Atlantic, Indian and Pacific Oceans. The family Torpedinidae comprises two genera and 20 known species, of which two have been recorded in the waters of the Cabo Verde archipelago in the eastern central Atlantic: *Torpedo marmorata* and *Torpedo torpedo*.

The West African torpedo *Torpedo mackayana* is a small ray (maximum total length c. 50 cm) that lives at depths of 15–50 m, distinguished by a greyish brown dorsal coloration with white blotches irregularly scattered on its disc and tail. Its population is decreasing, and it is categorized as Endangered on the IUCN Red List. In the eastern central Atlantic, *T. mackayana* is known from Mauritania to Angola, including São Tomé and Príncipe, but has never previously been recorded in the Cabo Verde archipelago.

Here we report the first records of *T. mackayana* off Maio Island, east of Cabo Verde (Fig. 1). The first sighting was on 2 March 2019 whilst snorkelling off Bitxe Rotxa beach, Porto Inglês. Three individuals of < 60 cm total length were observed during 15.24–16.00, at different locations along the beach at 5–8 m depth, by SSR and CMS. The second