Mountain Gorilla (*Gorilla beringei beringei*)

Mountain Gorilla © Patrick Van Klaveren

Range and Habitat: The Range States are Uganda, Rwanda and the Democratic Republic of Congo. The Mountain Gorilla inhabits the dense, cloud-covered rain forests of the Virunga Volcanoes at elevations between 2,000-4,000 metres in the National Parks of Mhaginga and Bwindi (Uganda), Volcanoes (Rwanda) and Virunga (Democratic Republic of Congo).

Migration and Population: The Gorillas cross the national boundaries where the Mhaginga, Volcanoes and Virunga National Parks meet. Estimates put the population between 380 and 700.

Threats and Status: The IUCN Red Data List places the Mountain Gorilla in the Critically Endangered category. The main threats are: habitat loss (through road building, deforestation for agriculture and logging); poaching for bushmeat or ensnarement in traps set for other target species; diseases such as ebola and other diseases transmitted by man; and war.

CMS listing: Appendix I – Gorillas are the only primates so listed.

Behaviour: Gorillas eat some 200 types of leaves, tubers, flowers, fruit, fungus and some insects. Their favourite foods include bamboo, thistles and wild celery.

Action: CMS has signed the Kinshasa Declaration, described as the "Kyoto of the Great Apes" and is a partner of the Great Ape Survival Project (GRASP). An Article IV Agreement under CMS entered into force on 1 June 2008. The Agreement aims to bring together the governments of the ten Range States to guarantee the conservation of the populations of all gorilla species (Lowland as well as Mountain). The ten countries concerned are Uganda, Rwanda, the Democratic Republic of Congo, the Republic of Congo, the Central African Republic, Equatorial Guinea, Angola, Cameroon, Gabon and Nigeria. The Agreement has action plans including elements for capacity building and public awareness raising, and is compatible with existing initiatives being conducted under the auspices of GRASP. There is a separate information sheet on the Gorilla Agreement in the Guide.

Key facts:

- Gorilla and human DNA are 98 per cent identical; together with the Chimpanzee, the Bonobo and the Orang Utan, they are humans' closest relatives.
- Gorillas can live to 50 years old; on average males grow to 1.8 metres and weigh 160 kg; females: 1.6 metres and 120 kg.
- Mischievous young gorillas are disciplined with deep-chested grunts, body posturing and stern looks.

Bukhara Deer (*Cervus elaphus yarkandensis*)

Bukhara Deer © Olga Pereladova / WWF Russia

Range and Habitat: The range states of the Bukhara Deer (*Cervus elaphus yarkandensis*, formerly listed as *Cervus elaphus bactrianus*) are Afghanistan, Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan. Floodplain (riparian) forests, especially the Tigrovaja Balka in Tajikistan, are home to over 30 per cent of the remaining population. Historically the species could be found over a wide area, which included all the river valleys of Amudaria and Syrdaria and the river catchment areas and the east bank of the Vakhsh in Afghanistan.

Migration and Population: Now only a few hundred animals remain, scattered in a few small populations in limited areas. Estimates of the population are still under 1,000 but numbers have increased from the all-time low point of 350 in 1999.

Threats and Status: It is listed as Vulnerable on the IUCN Red Data List. Artificial regulation of the water regime, habitat destruction (including clearance for agriculture especially for the cultivation of cotton) and illegal hunting are the main reasons for the Bukhara Deer's alarming decline in numbers. As much as 10 per cent of the riparian forests of the Amudaria Valley have been lost in recent years.

CMS listing: Appendix I (added at COP8, Nairobi 2005).

Action: The Memorandum of Understanding (MOU) covering four of the Range States was concluded in 2002. Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan, as well as the three cooperating international organizations, WWF, the International Council for Game and Wildlife Conservation (CIC) and CMS, have signed the MOU.

In 1989 the "Programme of Bukhara deer conservation and restoration" drawn up by Flint and Pereladova was approved by all Ministries of nature conservation of Central Asian States of the then USSR. The Programme analyzed the history of the species and suggested a series of measures on its restoration.

The Action Plan has four main objectives: Restoration of the range and number of the Bukhara Deer in suitable habitats; Development of a transboundary network of protected areas; Legal protection; and Enhanced international cooperation

The CMS Bukhara Deer MOU was developed in collaboration with the Central Asia Programme of the World Wide Fund for Nature (WWF). It became effective on 16 May 2002 and will remain open for signature indefinitely. Fortunately it appears that local communities are again recognizing the Bukhara Deer as a treasure of global significance.

Key facts:

- Central Asian peoples once called the Bukhara Deer "Hangul," the King's flower and it was considered almost sacred.
- It is also known as the Bactrian Wapiti.
- Conservation efforts include digging channels to restore water flow to the Bukhara deer's forest habitat.

African Elephant (*Loxodonta africana and L. cyclotis*)

African Elephants © Douglas Hykle

Range and Habitat: The Range States are - Angola; Benin; Botswana; Burkina Faso; Burundi*; Central African Republic; Cameroon; Chad; Congo; Democratic Republic of the Congo; Cote D'Ivoire; Equatorial Guinea; Eritrea; Ethiopia; Gabon; Gambia*; Ghana; Guinea; Guinea-Bissau*; Kenya; Lesotho*; Liberia; Malawi; Mali; Mauritania; Mozambique; Namibia; Niger; Nigeria; Rwanda; Senegal; Sierra Leone; Somalia; South Africa; Sudan; Swaziland; United Republic of Tanzania; Togo; Uganda; Zambia; and Zimbabwe. (The elephant is extinct in those countries annotated with *).

There has been some debate among scientists about whether the African Elephant is one species with two sub-species or whether there are two separate species – the Forest Elephant and the Savannah Elephant. CMS Parties adopted taxonomy recognizing the Forest Elephant (*Loxodonta cyclotis*) and the Savannah Elephant (*Loxodonta africana)* as distinct species.

The Forest Elephant has a smaller body, smaller ears and straighter tusks than the savannah subspecies. The Forest Elephant lives mainly in the rain forests of central and western Africa, while the Savannah Elephant's habitat is the grassy plains, woodlands, swamps and bushlands at altitudes ranging from sea level to high mountains.

Migration and Population: There are approximately 500,000 African elephants left in the wild. However, given severe poaching pressure for ivory, this figure is a rough estimate, not least because elephants are in decline across large parts of Africa. Southern and eastern populations are generally thought to be stable. The size of the central population is difficult to estimate because of the heavily forested nature of its habitat. The western population is fragmented in pockets containing relatively small groups.

Threats and Status: IUCN lists the African Elephant as vulnerable. Loss of habitat due to the expansion of human settlement and agricultural land is a further growing pressure. Poaching remains the main threat driven by a combination of lack of governance, poverty and not least demand for ivory.

CMS listing: both species on Appendix II

Action: In West Africa, the CMS Memorandum of Understanding (MOU) provides a framework for international cooperation between the thirteen Range States.

The main actions taken under the MOU are to improve baseline knowledge of the status of the population, to increase elephant numbers and to enhance their habitat. Range states also need to take urgent action to curtail habitat loss and enforce anti-poaching legislation. A second MOU for Central Africa is a possibility.

CMS Parties are committed to strengthening international cooperation for elephants across the continent, including maintaining transboundary corridors and enhancing domestic law enforcement.

Key facts:

- The African Elephant is the largest living land animal, the Savannah subspecies being larger than the Bush or Forest subspecies.
- The male weighs up to 7 tonnes and stands 4 metres tall; elephants weigh 120 kg at birth after gestating for 22 months.
- The elephant was hunted for the ivory of its tusks and elephant numbers dropped from millions to 400,000 by 1989.

Saiga Antelope (*Saiga tatarica*)

Male Saiga © Rotislav Stach

Range and Habitat: The Range States are Kazakhstan, the Russian Federation, Turkmenistan and Uzbekistan. The Saiga lives in the semi-desert steppe and arid grasslands of Central Asia. Because of their nomadic grazing, the Saiga herds play an important role in these ecosystems. Although some Saiga habitat has been degraded in the past, the current quality is generally good due to major reductions in livestock since the break-up of the Soviet Union.

Migration and Population: Alarmingly, scientists estimated that at the lowest point in the early 2000s less than 50,000 Saigas remained from a former population of nearly two million. Obstacles such as oil and gas pipelines can disrupt migration. Saiga Antelopes are unique nomadic animals with bodies adapted to harsh and unpredictable conditions. They are the size of goats with elephant-like snouts, which act as air filters, allowing them to breathe in cold, sandy environments. They are almost always travelling, moving across large distances for water or to escape predators such as wolves. Saigas can outrun natural predators—reaching speeds up to 80 km an hour.

Threats and Status: IUCN lists this species as critically endangered, due to habitat loss and poaching (for meat and the male's horn for use in traditional medicine).

Saiga Antelopes are legally protected throughout their range and in China. Yet uncontrolled hunting remains the largest threat to the antelope. The Saiga's rapid decline started after the collapse of the Soviet Union, which had enforced strict control over Saiga hunting. Poverty drove local people to hunt Saigas unsustainably for their horns, meat and skins. The horns remain an extremely valuable, sought-after ingredient in traditional Asian medicine.

In May 2010 reports were received of a mass die-off of 12,000 Saiga Antelopes in Western Kazakhstan, amounting to 1/3 of the Ural population. The carcasses recovered were predominantly females and calves. The Kazakh authorities established a commission to investigate the cause of the incident.

All but four of the more than 90 Saigas held at the leading captive breeding centre in Kalmyka, Russia died in April 2015 and in May 2015 over 150,000 animals were lost in the Betpak-dal population of Kazakhstan.

CMS listing: Appendix II - added at COP7 at the behest of Uzbekistan. A Memorandum of Understanding (MOU) entered into force in September 2006; the signatories are Kazakhstan, the Russian Federation, Turkmenistan and Uzbekistan (all four Range States). The CMS and CITES Secretariats co-operate closely on Saiga conservation.

Action: The CMS MOU for the Saiga Antelope includes an Action Plan with detailed proposals to secure three principal objectives. First, Saiga Antelope populations are to be restored to ecologically and biologically appropriate levels throughout their historic range. The second step is the restoration of habitat in suitable sites to optimal levels. The third aim is to enhance the level of international co-operation between the signatories to conserve and sustainably use Saigas.

Key facts:

- International trade in Saiga and Saiga horn, the latter used in traditional medicine, has been regulated by CITES since 1995.
- The Saiga has strange flexible, tubular nostrils reminiscent of an elephant's trunk; only the males which are larger than the females, have horns.

Schreibers' Bat (*Miniopterus schreibersii*)

Schreibers' Bat © François Schwaab

Range and Habitat: Schreibers' Bat (*Miniopterus schreibersii*) is found across a wide range extending from southern Europe to Japan and the Solomon Islands, the Philippines, northern Africa, and northern and eastern Australia. Caves, rocky clefts, culverts, caverns and galleries are often used as roosts. Studies of this species in India showed that the bats in any given area tend to concentrate in one large cave but that individuals also spend part of their time in secondary roosts within a radius of 45 miles (70 km).

Migration and Population: In Europe, they hibernate from November until the end of March. In Romania wintering colonies made up of as many as 10,000 individuals have been recorded. In the north of its range this species tends to migrate more, with the winter quarters lying approximately 100 kilometres further south. The longest recorded migration was over 800 km.

Threats and Status: Schreibers' Bat is on the IUCN Red List for low risk, near threatened species. It is not on the CITES lists. However this species has declined significantly in Western Europe and possibly throughout the world. Colonies that had contained thousands of individuals have disappeared. Schreibers' Bat is especially sensitive to disturbance and may disappear locally if frightened by human activity. Destruction of habitat is a serious threat to these animals.

CMS listing: Along with all other European populations of Rhinolophus and Vespertilionidae bat species, Schreibers' Bat is listed on the CMS Appendix II and is also covered by EUROBATS, the Agreement on the Conservation of Populations of European Bats. The current Appendix II listing also covers the African populations.

Action: The principal instrument in the conservation of bats is amending farming practices and land management, e.g. limiting the use of certain chemicals and pesticides that destroy the bats' prey, such as dung beetle larvae.

Further information can be found on the fact sheet in the Agreements section on "EUROBATS".

Key facts:

- Females reach reproductive maturity at the age of two — the gestation period is 8-9 months.
- The longest-lived Schreibers' Bat ever recorded reached the age of 16 years old.
- It hunts after sunset and can reach speeds of 55 kph. It seeks its prey (moths and beetles) in open country often far from the roost.

Scimitar-horned Oryx (*Oryx dammah*)

Scimitar-hornedOryx©OlivierBorn

Range and Habitat: The Scimitar-horned Oryx's original habitats were chiefly arid plains and deserts, and secondly rocky hillsides and thick brush. It rarely entered true desert areas. The Scimitar-horned Oryx is extinct in the wild, but its range used to extend from North Africa (Egypt), Central Africa (Chad) and West Africa (Senegal). Captive-bred specimens have been reintroduced in Tunisia.

Migration and Population: The Oryx usually lived in herds of 20-40 led by a male. During migration, herds of up to 1,000 used to form. They migrated northwards during the wet season and south again in the dry season.

Threats and Status: The IUCN Red Data List status for the Scimitar-horned Oryx is extinct in the wild. The principal cause was direct hunting, which increased with the advent of motorized vehicles and modern firearms, and was carried out by nomads, oil surveyors and military personnel both for sport and for meat and hides. Long-term climate change has rendered the Oryx's habitat less suitable, and human activities have reduced tree cover and led to overgrazing by livestock of traditional Oryx pasture.

CMS listing: Oryx dammah is listed on both Appendix I and II of CMS.

Action: The Scimitar-horned Oryx is one of the species covered by the CMS Sahelo-Saharan Antelope initiative, which stems from a resolution passed at COP5. The project was conducted by experts from the Institut Royal des Sciences Naturelles de Belgique and French conservation organizations, supported by grants given by the *Fonds Français pour l'Environnement Mondial* and the European Commission. The project built on efforts to establish wild populations from captive-bred stock. A meeting of experts was convened with representatives from fourteen former Range States: Egypt, Libya, Tunisia, Algeria, Morocco, Senegal, Mauritania, Burkina Faso, Mali, Niger, Nigeria, Chad, Sudan and Ethiopia. The Sahelo-Saharan Antelope programme has also attracted support from European zoos.

Key facts:

- Both the male and female of this species have long, curved horns which can reach several feet in length.
- This species stands 1.4 metres tall at the shoulder and can weigh over 200 kg.
- To retain fluid levels in the desert heat, the Oryx only sweats when its body temperature reaches 46°C (114°F).

Bottle-nosed Dolphin (*Tursiops truncatus*)

Bottle-nosed Dolphin © Charlie Phillips

Range and Habitat: Bottle-nosed Dolphins are found in most temperate and tropical waters; they are found on the high sea, in coastal waters with heavy surf, estuaries and shallow lagoons. They normally live in small groups of up to 15, although occasionally they are found in larger schools of up to 600.

Migration and Population: High sea populations migrate in spring to coastal waters and in the autumn back out to the open sea. The worldwide population is estimated to be in excess of 100,000.

Threats and Status: The Bottle-nosed Dolphin is listed as "Data Deficient" in the IUCN Red Data List. There are some areas in the world where Bottle-nosed Dolphins are directly targeted (e.g. by fishermen who are thought to kill the species because of perceived competition for fish and the damage the dolphins do to fishing gear). By-catch is a world-wide problem – the use of gill and purse-seine nets off Peru is thought to account for the deaths of 100 individuals per year. Foreign gillnet fisheries off Australia, tuna fisheries, shark fisheries off South Africa, trawling in the Western Mediterranean and unidentified fisheries in the English Channel all take their toll. Interactions with fisheries are also thought to contribute to strandings. Tests show that dolphins in the Western Mediterranean have been contaminated with DDT and other poisons, many of which affect male fertility. High levels of mercury were found in stranded specimens on the coast of Corsica. Other poisons such as tributyltin (TBT) and butyltin (BT) were found in dolphins resident in Asian waters.

CMS listing: The Bottle-nosed Dolphin is listed on Appendix II of CMS while the Black Sea subspecies *Tursiops truncatus ponticus* has been added to Appendix I. Along with the Harbour Porpoise (*Phocoena phocoena*), it is one of the two key species covered by ASCOBANS (North Sea, Baltic Sea, North East Atlantic and Irish Sea). As a regular resident of the Mediterranean and with a sub-species resident in the Black Sea, this species is protected under ACCOBAMS.

Action: By-catch, pollution, disturbance and collisions with shipping are the main threats to this species. Improving the design of fishing gear by attaching sonar deterrent devices (known as "pingers") for example is one remedy. Further research is also being undertaken into the causes of strandings.

CMS formed a partnership which declared 2007 and 2008 to be "Year of the Dolphin". See the separate sheet describing this initiative.

Key facts:

- This species became familiar to many people through the popular 1960s American TV Series "Flipper".
- Bottle-nosed Dolphins can grow to 4 m long and weigh 600 kg.
- There is a sub-species of Bottle-nosed Dolphin found in the Black Sea, *Tursiops truncatus ponticus* which was added to CMS Appendix I at COP9 in 2008.
- 2007 and 2008 were declared "Year of the Dolphin".
- See also the Agreement Sheets: ASCOBANS and ACCOBAMS.

Monk Seal (*Monachus monachus*)

Monk Seal © Fdz de Larinnoa Fundacion

Range and Habitat: Mediterranean Monk Seals mostly seek refuge in inaccessible caves, often along remote, cliff-bound coasts. Such caves may have underwater entrances, not visible from the water line. They inhabit open sandy beaches and shoreline rocks but the occupation of such marginal habitat is believed to be a relatively recent adaptation in response to human pressures — hunting, pest eradication by fishermen, coastal development and tourism. The former range extended across the Mediterranean and Black Seas, the Atlantic coast of North West Africa, Cabo Verde, the Canaries, Madeira and the Azores. Now only fragmented pockets remain around the coast of Greece and Turkey, and isolated sites in North Africa, Mauritania and the Madeira archipelago. Occasionally individuals are reported as far away as the French Atlantic coast and Senegal.

In 2009 a pup was born on an open beach – the first time such an event had been recorded since the 15th Century.

Migration and Population: The Mediterranean population is approximately 600. In view of the large distances involved, it is not thought likely that the Eastern Mediterranean and Atlantic populations intermingle.

Threats and Status: IUCN lists the Monk Seal as critically endangered. The main threats faced by the Mediterranean Monk Seal include: habitat deterioration and loss resulting from coastal development, including disturbance by tourism and pleasure boating; deliberate killing by fishermen and fish farm operators, who consider the animal a pest that damages their nets and 'steals' their fish, particularly in depleted coastal fishing grounds; accidental entanglement in fishing gear leading to death by drowning; decreased food availability due to over-fishing pressures; and events such as disease outbreaks.

CMS listing: Appendix I and II

Action: The Government of Spain tabled a proposal for an action plan for the Eastern Atlantic population of the Monk Seal which was considered at the 13th meeting of the CMS Scientific Council, immediately prior to the Eighth Conference of the Parties to CMS. A meeting was held in Antalya, Turkey in September 2006 under the auspices of the Regional Activity Centre for Specially Protected Areas (RAC/SPA), at which representatives of the Range States of the eastern Atlantic population were present to discuss the overall conservation plan for the species. In April 2007, a further meeting was held in Funchal, Madeira, to discuss practical ways of implementing the eastern Atlantic conservation plan.

An MOU covering the eastern Atlantic population was signed by representatives of Mauritania, Morocco, Portugal and Spain in October 2007 during the West African talks on Cetaceans and their Habitats conference in Tenerife.

Key facts:

- There is also a Hawaiian species of Monk Seal (*Monachus schauinslandsi*). The Caribbean species (*Monachus tropicalis*) is thought to be extinct.
- In ancient Greece, Monk Seals' love of the sea and sun associated them with the Gods, Poseidon and Apollo.
- Monk Seals are mentioned in the literature of Homer and appeared on ancient Greek coins.
- Monk Seals are one of three tropical pinnipeds (members of the seal family)—the others being the Californian sea lion and Guadalupe fur seal.

Harbour Porpoise (*Phocoena phocoena*)

Harbour Porpoise © GSM

Range and Habitat: Harbour Porpoises are found in temperate and sub-polar coastal waters of the northern hemisphere. While some populations are resident, significant seasonal movements occur, prompted mainly by the availability of food.

Migration and Population: Migratory porpoises tend to spend the summer inshore and move further offshore in winter. Others however spend the summer in the north of their range and the winter in the south. Estimates of the European population vary widely, between 20,000 and just under 100,000.

Threats and Status: The population has been substantially reduced by human activities in and near the porpoises' coastal habitat, most notably through by-catch. They are outcompeted for food by human fisheries and are susceptible to chemical poisoning. Studies in the Bay of Fundy in eastern Canada revealed high levels of cadmium, lead, mercury, PCB and DTT in the blubber, muscles and internal organs of specimens examined. The species is also prone to strandings.

CMS listing: The Harbour Porpoise is on CMS Appendix II and is one of the key species — along with the Bottle-nosed Dolphin (*Tursiops truncatus*) — covered by ASCOBANS (Baltic, Irish and North Seas and the North East Atlantic). It is also found in the Mediterranean and Black Seas and is therefore protected under ACCOBAMS. Different sub-species occur in the Atlantic, the Pacific and the Black Sea and its offshoots. Research is still being carried out to verify whether the Baltic Sea population is also distinct from neighbouring ones.

Action: A workshop organized by ASCOBANS was held in January 2002 in Jastarnia, Poland which drafted a recovery plan for the Baltic population of the Harbour Porpoise. An updated version of the plan was adopted by the Sixth Meeting of the Parties in 2009. ASCOBANS aims to increase the Baltic population to 80 per cent of its capacity. The Jastarnia Plan's objectives are to implement precautionary management measures immediately to reduce the by-catch rate to two or fewer porpoises per year in the portion of the Baltic that was surveyed in 1995; to improve knowledge in key subject areas as quickly as possible; and to develop more refined quantitative recovery targets as new information becomes available on population status, by-catch and other threats.

The International Day of the Baltic Harbour Porpoise (IDBHP) has been celebrated on the third Sunday of May every year since 2002. The Harbour Porpoise is the only cetacean species native to the Baltic. The aim of the IDBHP is to raise awareness, to generate public support of conservation efforts and to help gather data on sightings.

Key facts:

- In many languages (e.g. German and Polish) this species is known as the Pig Whale or Sea Pig (Schweinswal, Morswin). The Romans knew it as the Pig Fish, porcus piscus in Latin.
- They usually live alone or in small family groups, rarely to be found in larger communities of approximately 100.
- They are often attacked and even killed by larger species, such as dolphins.
- See also the Agreements sheets for ACCOBAMS, ASCOBANS and the Jastarnia Plan.

North Atlantic Right Whale (*Eubalaena glacialis*)

North Atlantic Right Whale © Leigh Ogden

Range and Habitat: They frequent the North-East Atlantic around the British Isles, Norway and Iceland and the east coast of Canada and the USA.

Migration and Population: 300-350 individuals are thought to exist. They prefer colder, pelagic waters for feeding and move to warmer coastal waters for breeding and calving. It is not entirely clear where females go in years when they are not calving. The Right Whale is very slow moving (its normal top speed is just 7 kmph) but it can be very acrobatic, leaping from the water and hitting the surface heavily with its stomach during the mating season. This behaviour may also be associated with attempts to get rid of parasites. This species is particularly vocal during the breeding season and uses a wide number of low frequency noises to attract a mate.

Threats and Status: North Atlantic Right Whales are listed as endangered in the IUCN Red Data book despite hunting being totally prohibited since 1937. Hunting of the species is thought to have begun as long ago as the 10th century by Basque whalers operating in the Bay of Biscay. While they are no longer hunted, they still face conservation problems including collisions with shipping, conflicts with fishing activities, the destruction of their habitats through activities such as oil drilling, and even competition for food from other species of whales. Their reduced numbers and slow reproductive rate (the females can only produce a calf once every three years) also place the survival of this species in the balance.

CMS listing: All three species of Right Whale (North Atlantic, North Pacific and Southern) are listed on Appendix I of CMS. The North Atlantic Right Whale is a rare visitor to the Mediterranean, and is therefore covered by ACCOBAMS.

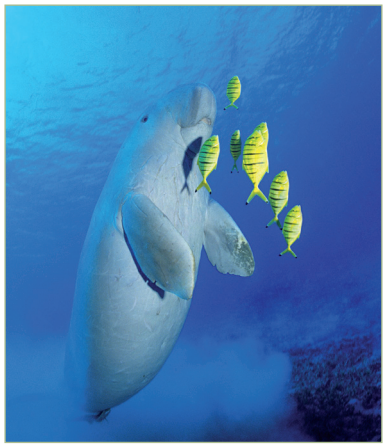
Action: A global ban on hunting Right Whales was first imposed in 1937 but it was not strictly adhered to, with a number of whaling nations continuing to take Right Whales as late as the 1960s. To counteract the alarming number of deaths caused by collisions with shipping, the authorities of the United States of America have imposed a compulsory reporting system for all vessels visiting US ports. Speed limits in certain channels during sensitive parts of the year (e.g. just after calving) have been considered.

The more numerous Southern Right Whale is the focus of the booming whale watching tourist industry with important centres in Hermanus (South Africa), Imbituba (Brazil) and the Peninsula Valdes (Argentina).

Key facts:

- Right Whales were so named because they were the most lucrative whales to hunt as they provided large quantities of oil.
- They eat plankton and krill; scooping them up with their mouths wide open and filtering out the water through their baleen (or whalebone).
- Adult Right Whales grow to between 11 and 18 metres (35-55 feet).
- There are two other species of Right Whale — the North Pacific (*Eubalaena japonica*) and the Southern (*Eubalaena australis*).

Dugong (*Dugong dugon*)



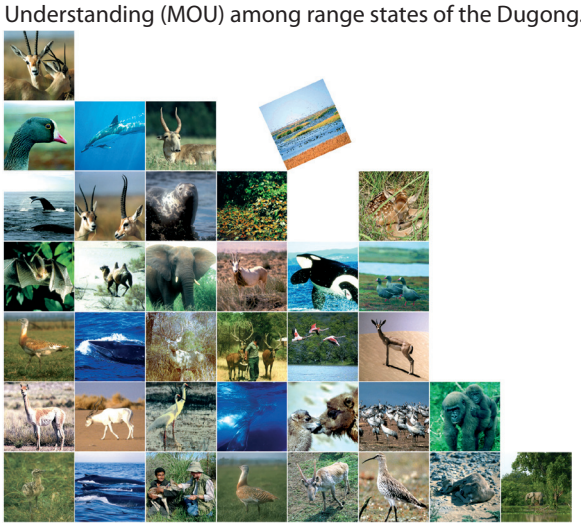
Dugong © Dr Armin Trutnau / Still Pictures

Range and Habitat: The natural range of the Dugong comprises the coastal waters of the Indian Ocean, Northern Australia and the Indonesian and Philippine archipelagos. They need sea grass pasture for grazing and access to fresh water, so tend to frequent shallow protected bays, shallow mangrove channels or the protected waters lying between islands.

Migration and Population: Sizeable herds (10,000) are found off the Barrier Reef and in the Torres Strait south of New Guinea. Numbers have dwindled off the coast of Kenya and Madagascar since the 1970s. There are smaller populations in the Philippines, Malaysia and in the Red Sea off Egypt. Some Australian populations undertake a winter migration moving 100 km to warmer waters. Some individuals have been known to travel further (as much as 600 km has been recorded).

Threats and Status: IUCN status – vulnerable. Dugongs are hunted for their meat and blubber and are sometimes taken by sharks, killer whales or crocodiles. Loss of delicate sea grass beds, their favoured habitat, due to eutrophification resulting from agricultural run-offs or through mining and trawling is also a problem.

CMS listing: The Dugong is listed on Appendix II of the Convention. Proposals arising from Conference Resolutions and Recommendations led to the negotiation of a Memorandum of Understanding (MOU) among range states of the Dugong.



Action: The CMS Conference of the Parties has twice encouraged the development of a legal instrument, including a conservation and management plan (CMP), to promote international efforts to conserve the Dugong.

The initiative to develop such an instrument has been led by Australia and Thailand, in close cooperation with the CMS Secretariat. A proposal was developed at two intergovernmental meetings held in Bangkok in August 2005 and May 2006. The Second Meeting endorsed the MOU and CMP. The CMP provides the basis for focused species and habitat-specific activities, coordinated across the Dugong's migratory range. Together, the MOU and CMP would be the primary platform for conservation actions on behalf of the species in all of the waters of coastal and archipelagic States of the Indian Ocean, East Asia and western Pacific Ocean, as well as their adjacent seas.

A Memorandum of Understanding under CMS was signed on 31 October 2007 in Abu Dhabi. The Secretariat of the MOU has been established with the support of the Authorities of Abu Dhabi.

CMS has also embarked on a joint project with the Institute of Environmental Sciences of Leiden University to draft a National Dugong Conservation Strategy and Action Plan for Indonesia.

Key facts:

- Dugongs are the smallest of the Sirenian Order— its larger cousins being the Manatee and Steller's Sea Cow.
- The name "Dugong" derives from the Malay language and means "mermaid".
- The Dugong's diet of sea grass has also led to the species' alternative name "sea cow".

Shy Albatross (*Thalassarche cauta*)

Shy Albatross © Barry Baker

Range and Habitat: The Shy Albatross is also known as the Tasmanian Shy Albatross, White-capped Albatross or Shy Mollyhawk. It breeds on three islands off Tasmania (Albatross Island, Pedra Branca and Mewstone). Most sightings of this species occur around Tasmania and Southern Australia but ringed birds (mainly juveniles from the Mewstone colony) have been seen as far away as South Africa. They are less pelagic than other albatross species and tend to stay within the continental shelf. Adults of breeding age tend to stay closer to the breeding sites.

Migration and Population: There is a breeding population of 13,000 pairs and a total population of perhaps 60,000 individuals.

Threats and Status: All breeding sites are legally protected and the birds experience little human disturbance — the only contact tends to be with conservationists. Occasional viral outbreaks have affected chick mortality detrimentally. Severe wave action may affect albatrosses on Pedra Branca. Alien species and heavy metal contamination are not thought to be as serious a problem for this species as they are for others.

Satellite tracking indicates that this species' range overlaps the areas covered by four regional seas fisheries agreements — notably the Convention on the Conservation of Southern Bluefin Tuna, Indian Ocean Tuna Commission and the Western and Central Pacific Fisheries Commission. As with all albatross, by-catch is the principal threat. Pollution, marine debris and ingestion of plastic are other main factors.

CMS listing: The Shy Albatross is listed on Appendix II of CMS and is also one of the species covered by the Agreement on the Conservation of Albatrosses and Petrels (ACAP).

Action: Pedra Branca and Mewstone Islands are internationally designated protected sites being part of the Tasmanian Wilderness World Heritage Area. Albatross Island enjoys national and state level protection. While studies of the Albatross Island population representing 40 per cent of the total have produced good baseline data, more research is needed for the Mewstone Island and Pedra Branca colonies (58 per cent and 2 per cent). Satellite tracking surveys of both adults and juveniles is being undertaken for all three populations. More research is required into the impact of deep-sea fisheries on this species.

Key facts:

- Shy Albatrosses are solitary day-time hunters which take most of their prey from the surface, but they do also dive and have been recorded to reach depths of 7 metres.
- Their diet is principally made up of fish, but they also take squid and crustaceans.

Lesser Kestrel (*Falco naumanni*)

Lesser Kestrel © M Woike / Still Pictures

Range and Habitat: The Lesser Kestrel is found in Morocco, Algeria, Tunisia, Libya, Portugal, Spain, France, Italy, Croatia, Bosnia-Herzegovina, the FYR of Macedonia, Albania, Bulgaria, Romania, Greece, Turkey, Israel, Jordan, the Islamic Republic of Iran, Iraq, Armenia, Azerbaijan, Georgia, the Russian Federation, the Republic of Moldova, Ukraine, Afghanistan, Turkmenistan, Uzbekistan, Kazakhstan, the People's Republic of China and Mongolia. It has disappeared from the Ural regions of Russia and Kazakhstan. It often nests in large colonies close to human settlements in building niches, on cliffs or in holes in trees. It feeds in habitats like steppes, natural and managed grasslands, and non-intensive agricultural lands.

Migration and Population: There are 50,000-60,000 in the South African population and 20,000 breeding pairs in the Mediterranean and North African population. It is declining, having experienced a substantial fall (possibly 50 per cent) since the 1970s. The northern population winters in southern Spain, southern Turkey and Malta and across North Africa.

Threats and Status: The Lesser Kestrel is listed as vulnerable in the IUCN Red Data list. The main cause of its decline in Europe is habitat loss and degradation in its breeding grounds, mainly resulting from intensive agriculture, urban growth and afforestation. A similar picture occurs in South Africa, where its grassland habitat is losing out to agriculture, afforestation and intensively farmed pasture. Pesticides may directly poison the birds, but they may also being taking a heavy toll of the falcons' insect prey. The restoration of old buildings can reduce the availability of suitable nesting sites.

CMS listing: CMS Appendix I and II, and Annex I of the CMS MOU on the Conservation of Migratory Birds of Prey in Africa and Eurasia.

Action: Research and management of the species, its preferred sites and habitats has been undertaken across Iberia and the European Mediterranean (France, Spain, Gibraltar, Portugal, Italy and Greece) and into Bulgaria, Turkey, Israel and Jordan as well as South Africa. A European action plan has been prepared by BirdLife International (BLI) on behalf of the European Commission. This identified the loss of breeding sites and prey species as critical factors in the species' decline. Building on this, CMS has promoted - again in collaboration with BLI - the extension of the Action Plan to cover the species' entire range.

Key facts:

Top priorities for conservation actions for the Lesser Kestrel are:

- promoting less intensive agricultural practices and reduced use of chemical pesticides.
- affording the species full legal protection and designating protected sites.
- reducing all unnecessary disturbance.
- improving knowledge of the species through field survey work.

Houbara Bustard (*Chlamydotis undulata macqueenii*)

Houbara Bustard © Still Pictures

Range and Habitat: There are two members of the Chlamydotis genus—the African Houbara (*Chlamydotis undulata*) and the Asian or Macqueen's Houbara Bustard (*Chlamydotis undulata macqueenii*). The geographical dividing line between the two is the Sinai Peninsula in Egypt. These species breed in deserts and other very arid sandy areas. They are omnivorous taking seeds, insects and other small creatures. Previously treated as two sub-species, they are now recognised as entirely separate species.

Migration and Population: The Asian Houbara migrates south every winter from its breeding grounds in Central Asia, China and Mongolia. Its wintering habitats are found in Pakistan, Iraq, the Islamic Republic of Iran and parts of the Arabian Peninsula, including the United Arab Emirates. Formerly, the entire Arabian Peninsula had a large resident breeding population, but these are almost extinct. Small breeding populations remain in Saudi Arabia, Yemen and Oman. There are approximately 50,000 Macqueen's Houbara Bustards, most of which come from Kazakhstan and Uzbekistan.

Threats and Status: IUCN lists the species as 'Near Threatened' as it has been drastically reduced due to excessive exploitation to the point of becoming endangered, or even extinct, in some places. Excessive hunting for falconry over the last few years is responsible for diminishing Houbara numbers.

CMS listing: The Macqueen's Houbara Bustard is listed on Appendix II of CMS.

Action: Captive breeding and release programmes are being undertaken by national institutions in Abu Dhabi, Morocco and Saudi Arabia, with releases taking place in the former range and to reinforce residual populations. Individuals released have been fitted with transmitters so they can be monitored in the wild to help assess the success of the programme.

CMS has been developing an Article IV Agreement for the species in conjunction with the National Commission for Wildlife and Conservation of Saudi Arabia. The draft action plan provides for species protection through legislation, guidelines for reintroducing the species to its former range, restoring, rehabilitating and conserving habitat, managing human activities, notably limiting hunting and promoting ecotourism and encouraging research and monitoring and capacity building through training programmes.

Key facts:

- There are two species of Houbara Bustard—the African (*Chlamydotis undulata*) and the Asian (*Chlamydotis undulata macqueenii*).
- The Houbara Bustard has been hunted close to extinction in parts of its range by falconers.
- The Central Asia populations are more migratory than the others, moving from Turkmenistan and China to India, Iran and the Middle East.

Siberian Crane (*Leucogeranus leucogeranus*)

Siberian Cranes in flight © ICF, Wisconsin USA

Range and Habitat: The Range States are: Afghanistan, Azerbaijan, the People's Republic of China, India, the Islamic Republic of Iran, Kazakhstan, Mongolia, Pakistan, the Russian Federation, Turkmenistan and Uzbekistan. The Siberian Crane breeds and winters in wetlands, preferring wide expanses of shallow fresh water with good visibility. It feeds on the shoots, roots and tubers of aquatic plants. The Siberian Crane is the most aquatic of the crane species, as it nests, roosts and feeds in the wetlands of the taiga (forest)/tundra transitional zone.

Migration and Population: The Eastern Asian flock, accounting for well over 98 per cent of the wild population, numbers 3,000-3,500 birds. It breeds in NE Siberia and overwinters at Poyang Lake in China. The Western/Central populations are almost extinct. The Western population breeds in a wilderness area of central Western Siberia and spends the winter in Iran near the Caspian Sea, where only one bird arrived during the last three years. The Central Asian flock recently nested along the Ob River near the Urals. It traditionally migrated 5,000 km southeast over the Russian Federation, Kazakhstan, Uzbekistan, Turkmenistan, Afghanistan and Pakistan, before arriving at the wintering grounds in Keoladeo National Park, India. The last known pair wintered there in 2001/2002 and currently there are no known individuals that winter in India. However, sightings accounting for 10-20 birds have been reported along both central and western flyways.

Threats and Status: The IUCN Red Data List places this species in the Critically Endangered Category. The species' migration and wintering habitats are under constant pressure from the demands of the growing human population. These include: agricultural development, wetland drainage, oil exploration, hunting and water development projects. The western population is threatened by hunting whereas the eastern one is at risk from the loss of wetlands.

CMS listing: Appendix I and II. There is a Memorandum of Understanding (MOU) concluded under CMS (see also separate sheet). The Siberian Crane was formerly listed as *Grus leucogeranus*.

Action: CMS and the US based NGO, the International Crane Foundation (ICF), lead conservation efforts through the MoU, which all eleven range states have signed. The Signatories meet regularly. ICF has been conducting captive breeding of Siberian Cranes since the 1970s, one of the earliest collaborative efforts from the US-USSR environmental agreement. Nowadays there are two more captive flocks in the world: Oka Crane Breeding Centre near Moscow and the Cracid & Crane Breeding and Conservation Centre in Belgium. The captive population (almost 400 birds) is a resource for the recovery of wild populations. The Western population could be strengthened and a new central population established using techniques developed for the Whooping Crane (*Grus americana*), which include teaching captive-bred birds to follow micro-light aircraft to learn migration routes.

Key facts:

- The Siberian Crane is the third rarest crane after the Whooping Crane (*Grus americana*) and the Red-crowned Crane (*G. japonensis*). It is the most endangered because of the unique combination of threats it faces.
- A US $ 10 million project under the Global Environment Fund was carried out in the People's Republic of China, the Russian Federation, the Islamic Republic of Iran and Kazakhstan with Siberian Crane conservation as one of its key elements.

Slender-billed Curlew (*Numenius tenuirostris*)

Slender-billed Curlew © Gomersall RSPB

Range and Habitat: The Slender-billed Curlew's breeding grounds are located in the remote and vast marshy forests of Siberia in the Russian Federation. Their precise location is not known and finding them has proved difficult in view of the huge area where suitable habitat occurs (in excess of 100,000 km^2) and the bird's tiny remaining numbers.

Migration and Population: This is one of the world's most endangered species with an estimated population of fewer than 50 individuals. It was considered relatively common in the 19th Century and flocks numbering 100s were reported as late as the 1960s. There have been no more than two or three verified sightings in any year over the past five years. There have been unconfirmed sightings of individual birds in Italy and Greece since 2000 and one in Northumberland, north-east England in 1998. The last known nest was identified in 1924 in Omsk, Siberia. The Slender-billed Curlew breeds in the Siberian taiga and spends the winter 5,000-6,000 km away on the Mediterranean and Persian Gulf coasts, crossing south-west Russia, Kazakhstan and south-east Europe.

Threats and Status: This species is listed as critically endangered by the IUCN. While there are still large quantities of suitable forest bog habitat available in the Siberian breeding grounds, excessive hunting in the Mediterranean winter sites and habitat degradation (drainage of wetlands for agricultural purposes) are thought to be the main causes of the bird's decline.

CMS listing: CMS Appendix I and II and AEWA 1a (CMS Appendix I), 1b (BirdLife International's Threatened Birds) and 1c (population less than 10,000).

Action: The Memorandum of Understanding (MOU) was concluded in September 1994 (see separate sheet) and covers 32 Range States in southern and eastern Europe, northern Africa, central Asia and the Middle East and has been signed by 18 of them together with the three co-operating organizations, CMS, BirdLife International and the International Council for Game and Wildlife Conservation. The geographic area stretches from north-west Siberia along the Caspian, Black and Mediterranean Seas to the Canary Islands off the coast of Morocco.

Key facts:

- The Slender-billed Curlew is one of six similar species of the same genus.
- This once common species may become the first European bird to go extinct in over 150 years.
- Extensive searches of potential breeding grounds have discovered no confirmed nesting sites.

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Andean Flamingo (*Phoenicopterus andinus*)

Andean Flamingos © Omar Rocha

Range and Habitat: The Andean Flamingo is the rarest of six flamingo species and occurs on the high Andean plateaus of Peru, Chile, Bolivia and Argentina. It lives on alkaline and salt lakes at high altitude (2,300-4,000 metres). There are populations in ten known locations. As a possible result of El Niño this species has just been recorded for the first time as breeding in Argentina.

Migration and Population: The Andean Flamingo is found on the high Andean plateaus of Argentina, Bolivia, Chile and Peru and vagrants have been recorded in Brazil. The population is estimated at 34,000 and decreasing.

Threats and Status: Eggs were taken as food from the middle of the 20th century until the 1980s. Mining, adverse extreme water-levels (due both to heavy rainfall, drought and human intervention), erosion of nest sites and human disturbance have also been detrimental. Juvenile birds are occasionally targeted outside protected areas for food and their feathers. Eggs and chicks are also predated by the Culpeo fox (*Pseudalopex culpaeus*), particularly in dry periods when the nest sites are more accessible. As a long-lived slow breeding species raising usually no more than one chick per season, this species is slow to recover from cataclysmic events.

CMS listing: Appendix I. A Memorandum of Understanding (MOU) among the four range states has been concluded.

Action: Surveying in high Andean salt-lakes to monitor known populations and locate additional ones will continue. More protected sites will be designated and the status of existing reserves will be raised. More wardens are required to guard unprotected nest-sites. Local conservation actions will include habitat management, prevention of egg-collecting and raising public awareness.

An important step forward will be achieved through the development of an MOU among the Range States under CMS. This should improve international cooperative efforts on behalf of the species.

CMS provided funding of a winter census to be carried out. The tenth meeting of the Scientific Council approved an outline project for conservation measures for High Andean Flamingos which also included James's or Puna Flamingos (*Phoenicopterus jamesi*).

Key facts:

- The Andean Flamingo is similar to the slightly smaller James's Flamingo (*Phoenicopterus jamesi*).
- The Andean Flamingo's main distinguishing features are its yellow legs and feet.
- The bill of the Andean Flamingo is adapted to filtering the small food items from the water.

Brent Goose (*Branta bernicla*)

Brent Geese © Daniel Bergmann www.danielbergmann.com

Range and Habitat: The species has a very large range in the northern hemisphere. It occurs in Belgium, Canada, China, Denmark, France, Germany, Iceland, Ireland, Japan, the Netherlands, Norway, Spain, the Russian Federation, the United Kingdom and the USA. Its preferred habitat is the seashore.

Migration and Population: The global population of the Brent Goose is estimated to be 570,000 individuals. Three subspecies are known: the Black, or Pacific Brent Goose (*Branta bernicla nigricans*), the Dark-bellied Brent Goose (*Branta bernicla bernicla*) and the Light-bellied Brent Goose (*Branta bernicla hrota*). The Black Brent Goose breeds in eastern Siberia, Alaska and northern Canada and migrates in the winter to the Asiatic and North American Pacific Coast. The Dark-bellied Brent Goose breeds in northern Siberia and winters in north-west Europe, and the Light-bellied Brent Goose breeds in eastern Canada, Greenland and Svalbard and winters at the Atlantic coast of North America and in north-west Europe.

Threats and Status: On the IUCN Red Data List the Brent Goose is categorized as "Least Concern". Possible threats are hunting and climate change. Climate change could have an impact on breeding and wintering habitats. The Brent Goose will face greater competition from species with a newly expanded or shifted distribution range. The effect of this additional threat has yet to be seen.

CMS listing: *Branta bernicla bernicla* is listed in column B, category 2b and 2c under AEWA (meaning it has a population of between 25,000 and 100,000 but depends on a habitat type, which is under severe threat and is showing significant long-term decline) and *Branta bernicla hrota* is listed with two sub-populations in column A, category 1c and category 2 (meaning the two populations number approximately 10,000 and between 10,000-25,000)

Action: For the Light-bellied Brent Goose, the use of key sites and migratory routes is being investigated by satellite telemetry studies. Research is being carried out on the genetic structuring within and between the global populations of this subspecies. An International Single Species Action Plan has been developed under AEWA for the East Canadian High Arctic population of Branta bernicla hrota, the Light-bellied Brent Goose.

Key facts:

- The Brent Goose breeds in the Arctic tundra and winters throughout a large range in the Northern hemisphere.
- Brent Geese migrate in family groups, forming V-shapes, and travel mostly at night.
- It used to stay strictly at the coast in the winter, but over the past few decades it started to go short distances inland and feed on grass and cereals.
- The Brent Goose has the IUCN conservation status Least Concern as a whole species, but populations of subspecies are considered to be in need of conservation measures.

Sociable Lapwing (*Vanellus gregarius*)

Sociable Lapwing © Lip Kee

Range and Habitat: The Sociable Lapwing occurs in Afghanistan, Armenia, Azerbaijan, Bahrain, Egypt, Eritrea, Ethiopia, India, the Islamic Republic of Iran, Iraq, Israel, Kazakhstan, Kuwait, Kyrgyzstan, Oman, Pakistan, Qatar, the Russian Federation, Saudi Arabia, Sri Lanka, Sudan, the Syrian Arab Republic, Tajikistan, Turkey, Turkmenistan, the United Arab Emirates and Uzbekistan. It breeds in dry steppes, semi-deserts and grazed areas with low vegetation cover. It winters on dry plains, sandy wastes and short-grass areas, adjacent to water.

Migration and Population: The Sociable Lapwing has been declining since the beginning of the 20th century. The population is estimated at 5,600 pairs. In February they start migrating from the wintering areas in Israel, Eritrea, Sudan, Oman, Pakistan and India and arrive at their breeding grounds in south-central Russia and Kazakhstan in May and June. They leave there in September. On the western migration route their stop-over sites were identified in the Middle East and Caucasus.

Threats and Status: The IUCN lists the species as critically endangered. Changes in agricultural practices in Europe and Asia have led to drastic changes of the habitat of the Sociable Lapwing. In areas where grazing by big herds of sheep and cattle has been abandoned, vegetation grows dense and unsuitable for breeding. In other areas agriculture has intensified. The regular treatment of fields and the increased trampling of cattle and sheep destroy the nests.

CMS listing: Appendix I of CMS and column A category 1a, 1b, and 1c of AEWA (meaning it is listed on CMS Appendix I, listed on the BirdLife International Threatened Birds of the World and has a population of less than 10,000).

Action: The Sociable Lapwing isprotected under national legislation in its breeding range (the Russian Federation and Kazakhstan). Since 2004 there has been an International Single Species Action Plan for the Conservation of the Sociable Lapwing under AEWA. Further research into the biology and threats is needed for effective conservation. In this respect, the Royal Society for the Protection of Birds, in a partnership with the Association for the Conservation of Biodiversity on Kazakhstan, the Russian Birds Conservation Union, the Bombay Natural History Society (India), Doga Dernegi (Turkey) and the AEWA Secretariat, have initiated a project to identify habitat needs and reasons for the decline of the Sociable Lapwing.

Key facts:

- Estimates suggest that there are ca. 5,600 breeding pairs in the wild.
- The Sociable Lapwing has declined by around 95 per cent in the last 15 years.
- It breeds in colonies of 2-30 pairs, but recently more often single nests have been found.
- By the end of the 20th century, it had ceased breeding in Europe.

Maccoa Duck (*Oxyura maccoa*)

Male Maccoa Duck © Sergio Bianchi

Range and Habitat: The Maccoa Duck is confined to Africa. A northern population occurs in Eritrea, Ethiopia, Kenya andthe United Republic of Tanzania, and a southern population occurs in Angola, Botswana, Lesotho, Namibia, South Africa and Zimbabwe.

Migration and Population: The global population estimate is 9,000 – 11,750 birds. The northern population appears to be in rapid decline, whereas the southern population is stable. Previously, the species was estimated to be more numerous and occurring in more countries, so the population size was overestimated. Movements are not very well known. Northern populations shift from the temporary wetlands occupied when breeding to deeper permanent waters when not breeding. Southern populations occur from sea-level to inland waters at high altitude. They probably move less than 500 km.

Threats and Status: The IUCN lists this species as Least Concern. Maccoa Ducks are caught incidentally in gill-nets and drown. Rapidly changing water levels in impoundments or as a result of deforestation disrupt breeding and feeding conditions. Another threat is degradation of habitats by draining of wetlands, invasion by alien vegetation and pollution. As Maccoa Ducks feed on invertebrates in the bottom sediment, the dose of pollutants that accumulate up the food chain might reach lethal or near-lethal levels. Disturbance and nest predation add more threats. The estimate of the population size and the rapid decline indicate that the species may soon be re-evaluated as Near Threatened or Vulnerable.

CMS listing: CMS Appendix II (along with all Anatidae species) and Column A category 1c in AEWA (i.e. it has a population of less than 10,000).

Action: In several countries the populations are being monitored. Under the African Eurasian Migratory Waterbird Agreement (AEWA), an International Single Species Action Plan has been developed in conjunction with the African Gamebird Research Education and Development Trust (AGRED). Key actions include measures to prevent the ducks becoming entangled in gill nets, protecting key habitats (only a small percentage of the birds live in protected sites, such as Ramsar Sites) and reducing hunting and poaching.

Key facts:

- The biology of the Maccoa Duck is not well known.
- South Africa has the largest population with c. 5,000 birds.
- Instead of flying away, Maccoa Ducks submerge when they are alarmed.
- Normally they are silent birds, but when courting, the males make a sound like a burp.
- The Maccoa Duck has featured on special issue stamps in Zimbabwe.

Northern Bald Ibis (*Geronticus eremita*)

Northern Bald Ibis © Sergio Tomey / www.sergiotomey.com

Range and Habitat: The range extends across Morocco and the Syrian Arab Republic, the Red Sea coast of Saudi Arabia, Yemen and Ethiopia, Eritrea and Djibouti. Its usual habitat is cliffs.

Migration and Population: There are an estimated 420 left in the wild (but fewer than 100 breeding pairs) and a further 1500 in captivity. Until recently it was thought that this species had been reduced to one non-migratory population in the Souss-Massa National Park near Agadir in Morocco after it had been declared extinct in Turkey in 1989 (it disappeared from the Alps 400 years ago). In 2002 a tiny migratory population was discovered in the Syrian Desert. It appears that these birds migrate south in winter down the west coast of Saudi Arabia and Yemen to Ethiopia, Eritrea and Djibouti in north-east Africa.

Threats and Status: The IUCN lists this species as Critically Endangered. A proposed tourist development near the Souss-Massa National Park, the species' one remaining stronghold in Morocco, could prove detrimental to the birds if not constructed in a sensitive way. Hunting and pesticide use may have contributed to the species' decline.

CMS listing: Appendix I and II of CMS. Both the Moroccan and south-west Asian Population are listed on AEWA in category 1a, 1b and 1c (meaning that it is included on CMS Appendix I and the BirdLife International's Threatened Birds of the World and has a population of less than 10,000)

Action: There is a programme of releasing captive bred specimens in the species' previous range in Spain, Italy and Austria. A project involving satellite trackingof the migratory population conducted by the Royal Society for the Protection of Birds and BirdLife Middle East in conjunction with the Syrian authorities has been undertaken following the discovery of the Syrian population. The transmitters are light and have been designed to cause the minimum inconvenience to the birds. This project has been in part funded by the African Eurasian Migratory Waterbird Agreement (AEWA). An International Single Species Action Plan under AEWA was endorsed in 2005. Microlight aircraft are being used to teach the birds reintroduced in central Europe how to migrate as they certainly would struggle to survive the Alpine winters due to the cold and lack of insects for them to eat.

Key facts:

- The Northern Bald Ibis disappeared from the European Alps 400 years ago.
- A small migratory population was discovered in Syria in 2002.
- The largest population of the species lives in Morocco, in the Souss-Massa National Park near Agadir.
- It is also known as the Hermit Ibis and the Waldrapp.

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Ruddy-headed Goose (*Chloephaga rubidiceps*)

Ruddy-headed goose © Alejandro Balbiano

Range and Habitat: The Ruddy-headed Goose lives in the South of Chile and Argentina and the Falkland Islands/Malvinas. It is found in marshy wetlands (or "vegas") and open country, such as coastal grassland and meadows, commonly seen with Upland or Magellan Geese (*Chloephaga picta*) and Ashy-headed Geese (*Chloephaga poliocephala*). Its diet consists of roots, leaves, stems and seed-heads of grasses and sedges.

Migration and Population: Two populations of the Ruddy-headed Goose (*Choephaga rubidiceps*), which is the smallest austral goose inhabiting South America, have been identified. The sedentary population is confined to the Falkland Islands/Islas Malvinas while the mainland one migrates between its breeding grounds in Tierra del Fuego and southern Patagonia of Chile and Argentina and its wintering quarters in southern Buenos Aires province, Argentina. It is the latter population, which is in serious danger of extinction with an estimated size at around 900-1,000 individuals.

Threats and Status: IUCN categorises the Ruddy-headed Goose as "least concern". Until as recently as the 1980s this bird was considered a threat to agriculture and it has now been taken off the Argentine and Falkland Islands / Islas Malvinas pest species lists. Persecution in its wintering grounds was a major factor in the species' decline. The introduction of Patagonian Grey Fox (*Dusicyon griseus*) to control rabbit populations on Tierra del Fuego may also have had an impact on the Ruddy-headed Goose. The larger and more aggressive Magellan or Upland Goose (*Chloephaga picta*) also outcompetes the Ruddy-headed Goose where the two species coincide on foraging and nesting grounds.

CMS listing: The Ruddy-headed Goose is listed on both Appendix I and II of CMS.

Action: CMS worked in collaboration with Wetlands International (WI) to produce management and conservation guidance for distribution among key players. WI has established good working relations with the Argentinian authorities in the Dirección de Fauna y Flora Silvestres. A Memorandum of Understanding (MOU) was signed in November 2006 underpinning existing bilateral cooperation between Chile and Argentina. The MOU is the first such agreement concluded under the auspices of CMS for an indigenous South American species. The CMS Secretariat serves as depositary for the MOU.

CMS provided funding for a conservation project for the Ruddy-headed Goose in 1999-2000. Again the help of WI was enlisted and the project led by expert Jesper Madsen was coordinated from WI's Buenos Aires office.

Key facts:

- the Ruddy-headed Goose builds its nest in grassy tussocks and lays clutches of between 4 and 11 eggs.
- outside the breeding season, it forms flocks, often mixing with Magellan and Ashy-headed Geese.

Leatherback Turtle (*Dermochelys coriacea*)

Leatherback Hatchling © G R Hughes

Range and Habitat: The largest and most pelagic turtle species and the only member of the Dermochelys genus, the Leatherback turtle inhabits warm seas and is recorded as breeding in Florida, the Caribbean, northern South America, West Africa, South Africa, Madagascar, Sri Lanka and Malaysia. They forage in coastal waters.

Migration and Population: IUCN estimates that the Pacific population may have fallen by 80 per cent. Elsewhere the decline has been less severe and in some locations the population is stable or even rising. There are perhaps 120,000 mature females.

Threats and Status: This species is categorized as critically endangered by the IUCN. While Leatherbacks are rarely taken for their meat (which is not particularly palatable), their eggs are targeted at nesting beaches. By-catch in gillnets and long-line fisheries is a major problem. The open beaches that the species prefers for laying its eggs are the most vulnerable to erosionin extreme weather. Collisions with boats in shallow waters and ingesting plastics, oil and other debris are also factors increasing mortality rates. Disturbance at nesting beaches through increased tourist use and light pollution, and rising temperatures through climate change affecting the gender balance of hatchlings, are also significant.

CMS listing: Appendix I and II. There are two Memoranda of Understanding (MOU) that have also been concluded under CMS for marine turtles, one covering the Atlantic coast of West Africa and the other the Indian Ocean and South-East Asia (for further information see the fact sheets in the Agreements and MOU section of the Guide).

Action: Conservation bodies and Fisheries Agencies are working to develop and distribute turtle excluder devices (TEDs) which are metal grids fitted over fishing gear. Larger non-target species such as turtles can escape while target species such as shrimps remain caught.

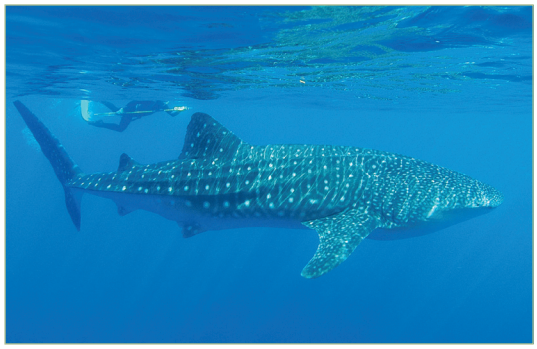
International trade in turtles and their eggs is regulated under the Convention on International Trade in Endangered Species (CITES). Subsistence use of turtles for food needs similarly to be regulated by the Range States to ensure that it remains sustainable. Captive breeding efforts are less successful for this species than with other turtles because of the leatherback's tendency to injure itself on the sides of holding tanks.

Public-awareness raising programmes will play a significant part in preventing disturbance to nesting beaches frequented by tourists.

Key facts:

- Instead of a visible shell, the Leatherback Turtle has a carapace made of hundreds of bony plates covered in a leathery skin (hence the name).
- It feeds on squid and other soft-bodied animals and vegetable matter.
- Leatherback Turtles can reach a length of 2 metres and weigh 900 kg.

Whale Shark (*Rhincodon typus*)



Whale Shark © Alan James Photography / MCSS

Range and Habitat: The Whale Shark is the largest living fish species (growing up to 14 metres long), and the only member of the Rhincodon genus. It has existed in more or less its current form for 60 million years. It lives in the open sea in tropical and warmer temperate waters. While largely pelagic, the whale shark does periodically congregate for feeding—such gatherings are known to take place off Western Australia, the Philippines, Zanzibar and Honduras.

Migration and Population: There are no reliable population estimates, but there is evidence to suggest that Whale Sharks are highly migratory with their movements determined by the occurence of food supplies and the presence of certain geographic features. One individual that was tracked was found to have travelled over 13,000 km over the course of three years, this despite the fact that the Whale Shark is not considered to be a particularly efficient swimmer.

Threats and Status: IUCN places the Whale Shark on its vulnerable list. Small scale artisanal and larger scale commercial fisheries do target the species during its seasonal congregations.

CMS listing: The Whale Shark was added to Appendix II at COP6 in 1999. It is also covered by the CMS MOU on Sharks.

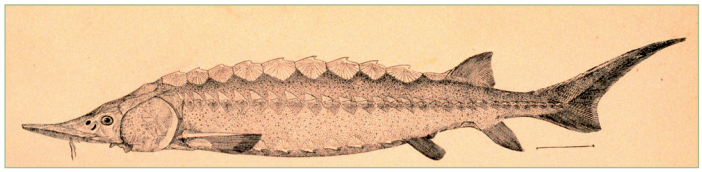
Action: CMS organized an exploratory meeting in December 2007 in the Seychelles to which representatives of range states were invited. The purpose of the meeting was to discuss the outline of an instrument to afford protection to all shark species listed on the CMS appendices; the other species include the Great White Shark (*Carcharodon carcharias*) and the Basking Shark (*Cetorhinus maximus*). The consensus of the Seychelles meeting was that the best way forward was to negotiate an instrument under CMS. A second meeting was arranged to take place immediately after the CMS COP9 in Rome in December 2008 and the text was finally agreed at a meeting in Manila held in February 2010.

The First Meeting of the Signatories to the MOU was held in September 2012 in Bonn, Germany.

Key facts:

- The Whale Shark's skin is up to 10 cm thick. It has several rows of tiny teeth—as many as 300 teeth in all.
- It is a filter feeder and its prey is made up mainly of krill, plankton and squid.
- Whale Sharks are generally placid in their behaviour towards human divers.
- Little is known about Whale Sharks' reproduction but they are thought to give birth to live young.

European Sturgeon (*Acipenser sturio*)



European Sturgeon © George Brown Goode

Range and Habitat: Once found along the coasts and in the coastal rivers of most of Europe, its range is now restricted to the North Sea, the United Kingdom and the Atlantic coast of France. Only one breeding population remains, the one living in the basin of the Gironde, Dordogne and Garonne rivers.

Migration and Population: There are thought to be approximately 1,000 individuals spread across the remaining range. The European sturgeon is an anadromous migrant, meaning the adults leave the sea to swim up rivers to reproduce.

Threats and Status: The European Sturgeon is amongst the most threatened fish in Europe, as it is in critical danger of extinction. The population is fragile and genetically limited. Physical and chemical changes to watercourses caused by gravel extraction or pollutants can adversely affect the sturgeon. They are especially sensitive to any physical barriers to their migration. Competition for food from other species, especially other species of sturgeon, and poaching are also significant factors.

CMS listing: The European Sturgeon is on Appendix I (added at COP8) and Appendix II (COP6)

Action: With such a low residual population, it is unlikely that wild populations will be able to recover without the help of captive breeding and release schemes. Knowledge of the sturgeon's life cycle and ecological needs must be improved. Expertise in rearing sturgeons in captivity must also be improved. With so many potential partners having to be involved in any conservation effort, communication is vital. Lessons learned from efforts to maintain the sturgeon within its current range can be transferred to efforts to reintroduce the species to its historic range in the Baltic and the Mediterranean. Because the sturgeon is such a wide ranging species, it is impossible to designate its entire habitat as protected areas. Key sites however are being included in the EU's Natura 2000 network, some in France and even some in Mediterranean countries where the species would have to be reintroduced.

An Action Plan is being developed in the framework of the Bern Convention on the conservation of European Wildlife and Natural Habitats and CMS.

Key facts:

- The European Sturgeon is sometimes also known as the Atlantic Sturgeon, which could lead to confusion with *Acipenser oxyrhincus*.
- It is a long-lived species and reaches reproductive maturity relatively late (10 years for males and 13 for females).
- It is the largest migratory fresh water fish in Europe.

Monarch Butterfly (*Danaus plexippus*)

Monarch Butterflies
© Gene Nieminen/USFWS

Range and Habitat: USA (including Hawaii), southern Canada, Central America, most of South America, some Mediterranean countries, the Canary Islands, Australia, Hawaii, Indonesia and many other Pacific Islands. Monarchs are found all around the world in sub-tropical to tropical areas. They are found in open habitats including meadows, fields, marshes and cleared roadsides.

Migration and Population: Not all populations are migratory. In North America, each autumn, Monarch Butterflies congregate in their thousands (even millions) in the south of Canada to migrate southwards through the USA to Mexico, covering distances of up to 3,000km. Some overwinter in Angangueo, Michoacan province, Mexico; others go to Cuba and California. The migration may take up to three generations to complete with the females laying their eggs along the way.

Threats and Status: The greatest threat to the Monarch Butterfly is the destruction of its habitat through the building of new roads, housing developments and agricultural expansion. Also, the milkweed plants, on which the larvae feed exclusively, are considered a pest species because it is a noxious weed and it is often eradicated. The Monarch Butterfly has no special status on the IUCN Red Data List, but IUCN has recognised the Butterfly's winter migration as a "threatened phenomenon". Natural disasters such as severe storms in the Mexican wintering grounds have led to destruction of the Butterfly's habitat and to heavy reductions in numbers.

CMS listing: Appendix II (the only insect listed on CMS)

Action: The Monarch Butterfly is one of the species covered by the Western Hemisphere Migratory Species Initiative (WHMSI). In 1986 the Monarch Butterfly Biosphere Reserve, inscribed in the UNESCO list of World Heritage Sites, was created in the Butterfly's hibernation area in Mexico. The Monarch Conservation Fund provides a financial mechanism to offer landowners compensation for revenue lost when logging operations cease and to facilitate conservation measures. These focus primarily on habitat restoration and protection. Landowners are encouraged to manage their land in a manner, which preserves the elements most vital for the Butterfly's survival. In some cases a certain portion of the land is set-aside as butterfly habitat.

Key facts:

- Storms in the autumn of 2006 blew many Monarch Butterflies across the Atlantic—some were found in Britain.
- Their favourite food is the poisonous plant, milkweed.
- Their bright orange colouration probably signals to potential predators the fact that Monarch Butterflies are poisonous.
- The perfectly palatable Viceroy (*Limenitis archippus*) mimics the Monarch's markings to deter predators.