

Location



Introduction

The Republic of Kazakhstan is bordered by the landlocked Caspian Sea to the southwest, by Turkmenistan, Uzbekistan and Kyrgyzstan to the south, by China to the southeast, and by the Russian Federation to the northeast, north and northwest. The country shares a border on the landlocked Aral Sea with Karakalpakstan, an autonomous region of Uzbekistan.

Kazakhstan's climate is dry with most areas experiencing less than 200 mm of rainfall each year. Winters are cold, with temperatures in the north ranging from -4 to -20°C, and -2 to -10°C in the south. Summers are warm, averaging 30°C in much of the country.

There are ongoing issues concerning the country's borders with the Russian Federation and Uzbekistan, however these may not impact activities on the Caspian or Aral Seas.

Regional Seas and Biogeography

Caspian Sea

Large Marine Ecosystems (LMEs):
None.

Habitats

The country's approximately 3370 km of coastline is split between the Caspian (2,300 km) and Aral (1070 km) Seas, and ranges from rocky and sandy shores with some rocky offshore islands, to extensive wetlands in its river deltas.

- *Seagrass beds* are found mainly north of Aqtau on the western side of the Caspian Sea.
- *Saltmarshes* are limited to areas within the Ural and Volga River deltas
- *Reedbeds* are limited to areas within the Ural and Volga River deltas.

Biodiversity Hotspots

→ Ramsar sites

Ural River and Adjacent Caspian Sea Coast, which is part of the North Caspian Nature Reserve, is comprised of a river delta wetland and the northern shore of the Caspian Sea with a wide variety of marine/coastal and inland wetlands. The site supports more than 290 avian species and is a significant spawning ground for Caspian sturgeon species. Large numbers of nesting, moulting and migratory birds are seen throughout the site.

→ IMMAs

Three areas of the Caspian Sea were designated as IMMAs in 2021. Details are limited but the areas are:

Caspian Seal Breeding Area
Caspian Seal Moulting and Haulout Areas
Caspian Seal Transitory Migration and Feeding Area

Of these, sections of the Moulting and Haulout Areas, and Transitory Migration and Feeding Area, are found on the Kazakhstan coast.

→ IBAs

Kazakhstan portion of the Volga River Delta is an area of inundated flatland with a mosaic of pools, large areas of open water, channels, and reedbeds which hosts more than 250 bird species, particularly during migration, when more than 20,000 individuals may be present. Caspian Seals (EN) are also found here.

Ural River Delta includes the navigable Ural-Caspian Channel and secondary branches of the Delta, with submerged reedbeds and alluvial banks hosting more than 250 avian species. During migration more than 20,000 individuals may be present. Caspian Seals (EN) are also found here.

The Tyulen'i (Seal) Islands is an archipelago of seven islands in the northeastern Caspian Sea. The largest island, Kulaly, is largely semi-desert with sandy west shore and creeks, coves and bays on the eastern side.

Most of the other islands are covered with reed overgrowth. Large numbers of terns breed here in summer and tens of thousands of waterbirds, waders and gulls use the area for resting on migration in spring and autumn. Caspian Seal (EN) are also present in good numbers.

At risk Wildlife

In this section, some individual wildlife species are mentioned followed by a letter in parentheses. These are species included in the IUCN Red List of Threatened Species within the top three categories of risk - Vulnerable to extinction (VU), Endangered (EN) or Critically Endangered (CR). A more complete list of IUCN listed species is found in Appendix 1.

→ At risk birds

The Caspian Sea is located on the Black Sea/Mediterranean, Central Asian and West Asian/East African Flyways, making it an area of conservation value for many Eurasian species. The wetlands of the Ural and Volga River Deltas provide important habitat for thousands of waterbirds during migration, and moulting waterbirds during summer. Other important avian areas in Kazakhstan include Komsomolets Bay, and the seacoast south from Aktau.

Open waters and associated reedbeds in the northern Caspian are important for many feeding, roosting and nesting aquatic birds. Offshore islands are also utilised for nesting and roosting.

→ At risk reptiles

Marine reptiles have been reported in the Caspian Sea and are limited to the occasional sea snake.

→ At risk mammals

The only marine mammal found in the Caspian Sea is the Caspian Seal (EN), a species affected by a canine distemper outbreak in 2000, which significantly reduced their already declining population. The seals concentrate in the Northern Caspian at the edge of the ice cover during winter. In summer many migrate to the Middle and Southern Caspian, while part of the herd remains in the north. Komsomolets Bay (Durnev Islands) host the largest number of seal haulout sites, with further sites found in the Prorva and Repair Shalygi Island areas. Seals in Kazakhstan are regularly seen near offshore oil exploration areas.

Past experience with oil spill and potential risks

A tanker explosion (*General Shikhlinisky*) and a shipwreck (*Mercury-2*) in 2002 and a shipwreck (*Islam Safarly*) in 2001 in the region around Aktau, as well as oil leaks from dormant wells near the Russian Federation border in 2004 and 2006 have been reported. Details regarding these spills are limited.

The main source of oil pollution has been from the shipping industry and storage facilities, particularly in the southern region of the country around the port of Aktau. The development of the Kashagan oil field in the north provides the greatest risk in that area.

International and Regional Treaties and Agreements

→ Oil spill and HNS Response

- CLC Convention 69
- CLC Protocol 76
- CLC Protocol 92
- FUND Protocol 76
- FUND Protocol 92
- FUND Protocol 2003
- LLMC Convention 76
- LLMC Protocol 96
- OPRC Convention 90
- HNS Convention 96
- HNS PROT 2010
- OPRC_HNS 2000
- BUNKERS CONVENTION 01

→ Marine Biodiversity Protection

- Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran Convention)
- Protocol Concerning Regional Preparedness, Response and Co-operation in Combating Oil Pollution Incidents (Aktau Protocol) under the Tehran Convention
- Protocol for the Conservation of Biological Diversity (Ashgabat Protocol) under the Tehran Convention
- Protocol on Environmental Impact Assessment in a Transboundary Context under the Tehran Convention
- Oil Spill Preparedness Regional Initiative for the Caspian-Black Sea-Central Asia (OSPRI)

Oil Spill Response and HNS Spill Response

→ National Contingency Plan?

The National Contingency Plan or NCP (Ministry of Energy Order No. 134/NCP) was enacted in 2015.

→ Role of Competent National Authorities

The Ministry of Energy (MOE) is in charge of the NCP and Aktau Protocol implementation. The Ministry of Emergency Situations (MES) manages response and provides clarity of management and coordination of response. The Committee of Forestry and Wildlife (CWF) identifies sensitive natural areas and sets the regime for use and protection of wildlife and natural protected areas. Therefore it is probable that CWF would determine areas and species at risk.

The Ministry of Ecology, Geology and Natural Resources (MEGNR) will likely have authority over wildlife response and work with the Veterinary Control and Inspection Committee of the Ministry of Agriculture and the CWF on determining rescue and rehabilitation activities.

National Academy of Sciences' Department of Microbiology and Virology and Department of Biological Safety may be involved in monitoring for disease outbreaks and other mortality events.

Oiled Wildlife Preparedness and Response

→ Formal guidelines?

There are no formal guidelines in place for oiled wildlife response. A number of oil companies active in Kazakhstan's waters have, however, included oiled wildlife response in their contingency planning.

→ Response objectives and strategy

While there are no national objectives or strategies for oiled wildlife, oil companies which have included oiled wildlife response in their planning would follow their stated objectives and strategies, contingent on national government approval.

→ Euthanasia or rehabilitation?

It is likely that rehabilitation would be allowed, which would likely be overseen by the Veterinary Control and Inspection Committee, in situations where there is professional support for a response mounted in conjunction with the authorities noted above.

→ Impact assessment

MEGNR would likely oversee any impact assessment activities, with the possible assistance of the Institute of Zoology (Almaty), the Institute of Virology and Microbiology (Almaty). The Committee for Veterinary Control and Supervision of the Ministry of Agriculture may be called in to investigate wildlife mortality.

It is possible that the Institute of Hydrobiology and Ecology (IHE) which conducts field research on marine life would be involved as well.

→ Notification and early response

There is no system for notification of, and early response to, oil-impacted wildlife, however, the MES may contact the MEGNR if a response is indicated.

→ Wildlife responders

There are no experienced oiled wildlife responders in Kazakhstan, however, the Almaty Zoo has experience in caring for aquatic birds and maintains a captive breeding program for endangered aquatic avian species and the Karaganda Zoo has experience with husbandry and captive care of aquatic birds.

The IHE may be able to provide some assistance should Caspian Seals be impacted.

The Association for the Conservation of Biodiversity of Kazakhstan (ACBK), a Birdlife International partner, is active in wildlife and habitat conservation and may be able to assist.

→ Cooperation between stakeholders

The various government agencies have a history of working together. ACBK has worked with the Royal Society for the Protection of Birds (RSPB, UK) and the Frankfurt Zoological Society (Germany) on avian conservation projects.

→ **Permanent facilities**

There are no permanent facilities for oiled wildlife response, nor any wildlife rehabilitation facilities.

→ **Current processes**

In 2022, a webinar presented the result of research on the Caspian Seal in Kazakhstan waters, organised by the MEGNR, with support from Tengizchevroil LLP. Efforts are underway for the Ministry to develop and approve a long-term action plan for the conservation of the species, and the biodiversity of the Caspian Sea.

Documentation and references

Sea Alarm Country Profile 2014: <https://www.sea-alarm.org/publications/country-wildlife-response-profiles/>
Birdlife Data Zone: <http://datazone.birdlife.org/country/kazakhstan>
IUCN Redlist: <https://www.iucnredlist.org/species>
Caspian Seal data: <https://marinemammalscience.org/facts/pusa-caspica/>
Ramsar sites: <https://www.ramsar.org/wetland/kazakhstan>
Caspian Seal IMMAs: <https://www.iucn.org/news/marine-and-polar/202112/endangered-caspian-seal-habitat-awarded-important-marine-mammal-area-status>
Pollution sources: <https://link.springer.com/article/10.1007/s12665-018-7347-0>
Oil spills in Kazakhstan: <https://www.grida.no/resources/13600>
Ministries and Committees of the Kazakhstan Government: https://egov.kz/cms/en/information/state_agencies/ministries_committees
Institute of Zoology: <https://zool.kz/eng>
Oceans + Habitats Kazakhstan Profile: <https://habitats.oceanplus.org/kazakhstan>
Ocean Data Viewer: <https://data.unep-wcmc.org/>
Results of Research on Caspian Seals for 2015-2020: <https://ihe.kz/en/researches/97-itogi-issledovaniya-kaspijskikh-tyulenej-za-2015-2020-gg>

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Appendix 1

→ **At risk birds**

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Common name / Latin name / IUCN Red List Category (CR,EN,VU) / Resident-Migratory (season) / Breeding-Nesting-Pupping (season)

Siberian Crane / *Leucogeranus leucogeranus* / CR / Migratory (Spring/Autumn) / Non-breeding
White-headed Duck / *Oxyura leucocephala* / EN / Migratory (Spring/Autumn) / Non-breeding
Red-breasted Goose / *Branta ruficollis* / VU / Migratory (Spring/Autumn) / Non-breeding
Swan Goose / *Anser cygnoid* / VU / Migratory (Summer) / Breeding (summer)
Lesser White-fronted Goose / *Anser erythropus* / VU / Migratory (Spring/Autumn) / Non-breeding
Long-tailed Duck / *Clangula hyemalis* / VU / Migratory (Spring/Autumn) / Non-breeding
Velvet Scoter / *Melanitta fuscac* / VU / Migratory (Spring/Autumn) / Non-breeding
Marbled Teal / *Marmaronetta angustirostris* / VU / Migratory (Variable) / Non-breeding
Common Pochard / *Aythya ferina* / VU / Migratory (Summer) / Breeding (summer)
Horned Grebe / *Podiceps auritus* / VU / Migratory (Summer) / Breeding (summer)
Pallas' Fish Eagle / *Haliaeetus leucoryphus* / EN / Migratory (Spring/Autumn) / Non-breeding
Slender-billed Curlew / *Numenius tenuirostris* / CR / Migratory (Spring/Autumn) / Non-breeding
Sociable Lapwing / *Vanellus gregarius* / CR / Migratory (Summer) / Breeding (summer)

➔ **At risk reptiles**

Common name / Latin name / IUCN Red List Category (CR,EN,VU) / Resident-Migratory (season) / Breeding-Nesting-Pupping (season)

Water snakes have been reported in the Caspian sea, species not verified / / / / Breeding/nesting (year round)

➔ **At risk mammals**

Common name / Latin name / IUCN Red List Category (CR,EN,VU) / Resident-Migratory (season) / Breeding-Nesting-Pupping (season)

Caspian Seal / *Phoca caspica* / EN / Resident / Pupping (mid-Jan/late Feb), rarely within Kazakhstan waters