

Mammals of Kazakhstan

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Kazakhstan is one of the world's largest and less densely populated countries. Its post-Soviet dictator Nazarbaev is more reasonable and less cruel than his colleagues to the north and south. The economy isn't bad thanks to vast oil and gas reserves. The political situation appears mostly stable, although Putin has dropped hints that he's considering invading Kazakhstan's Russian-speaking north as soon as Nazarbaev dies or otherwise loses power; Russian historical mythology considers about 1/3 of Kazakhstan to be rightfully Russian because nomads such as Kazakhs have no land rights.

I spent a lot of time exploring Kazakhstan in 1987-1992. By the end of that short period, travel in ex-Soviet Central Asia became too dangerous. What used to be a friendly and hospitable playground for Russian masters was now plagued by skyrocketing crime, predatory police, and exploding ethnic conflicts. After some unpleasant accidents including an attempted execution by a firing squad, I gave it up. Today Kazakhstan is reportedly more or less safe, although the police is still corrupt, much of the population is marginalized, and many remote towns are quietly ruled by criminal gangs.

Kazakhstan was Stalin's preferred destination for forced resettlements. Since that time, Chechens and Crimean Tatars have almost all left, but there are still a few Volga Basin Germans, so speaking German might unexpectedly help. Almost everybody speaks at least some Russian, but English is mostly useless away from a handful of tourist centers.

Much of Kazakhstan is an endless plain, changing from flat to hilly as you move east, and from lush ex-grassland (now ploughed over) to bleak desert as you move south. Precipitation falls mostly in winter, unlike in Mongolia where it's mostly in summer. That makes Kazakh steppes less productive, which is why the density of ungulates in Kazakhstan has always been lower (and why nomads have always invaded from east to west). On the eastern and southeastern borders rise formidable mountain ranges. Winters are extremely harsh, with frequent blizzards and temperatures below -30°C; only in the far south they are a bit milder. The Kazakh part of the Caspian Sea and all other bodies of water normally freeze over in winter. Summers are very hot and dry, except in the mountains above the timberline. The best times to visit are April (when wild tulips bloom), May (when poppies follow), and September (when the weather is most comfortable). Large mammals look most photogenic in December, while October-November is the best time for snow leopard tracking. As everywhere in the former Soviet Union except the Baltic States, your chances of seeing animals larger than hedgehogs approach zero near human settlements and roads, so even though public transportation is generally good, having a 4x4 vehicle will make finding mammals a lot easier. Better drive yourself. Trekking is needed to see most montane species.

Northern grasslands

Northern Kazakhstan was once a gorgeous sea of *kovyl'* (feathergrass), but the entire area was converted to wheat fields by waves of migrants from Russia and Ukraine, many of whom didn't come voluntarily. The only common mammals of agricultural lands are **yellow** (in the western half) and **red-cheeked** (in the eastern half) **ground squirrels**, **striped field mouse**, **Eurasian harvest mouse**, and **common vole**. If there are large shrub patches, fallow fields, or planted groves, you might find also **red fox** (ssp. *karagan*), **Urals field mouse**, **black-bellied hamster**, **narrow-headed vole**, and **Cape hare** (of *europaeus* ecotype). Numerous wetlands are inhabited by **European water shrew**, **Eurasian shrew**, **ermine**, **American mink** (introduced), **boar** (only in large ones), **European water vole**, **tundra vole**, and **muskrat** (introduced).

The Ural (Zhayik) is the only river flowing into the Caspian Sea that's not totally screwed up. Its floodplain above and below Oral (a. k. a. Uralsk) has lots of hollow trees and is the best place in Kazakhstan to see **common noctule**, **steppe myotis**, and **Kuhl's pipistrelle**. **Russian desman** is supposedly present, too. Look for **russet** and **little ground squirrels** and **East European vole** in surrounding uplands, and for **boars** in adjacent fields at night. Mugojary Hills, a southern continuation of the Urals east of Aktobe, had lots of **steppe marmots**, **greater jerboas**, and **steppe lemmings** in 1990.

The largest remaining patches of feathergrass steppe, plus a few small forests and wetlands, are protected in Naurzum Nature Reserve south of Kostanai. In four days there in June 1991 I saw lots of mammals: **Laxmann's shrew**, **long-eared hedgehog**, **steppe polecat**, **Asian badger**, **corsac fox**, **Siberian roe deer**, **bobak marmot**, **little and russet ground squirrels**, **greater jerboa**, **southern birch mouse**, **Urals and striped field mice**, **Eurasian harvest mouse**, **Eversmann's and black-bellied hamsters**, **northern mole-vole**, **narrow-headed and tundra voles**, **steppe lemming**, and **Cape hare**. Other species supposedly present are **northern white-breasted hedgehog**, **red fox**, **marbled polecat**, **least weasel**, **ermine**, **raccoon dog** (introduced), **wild boar**, and (in the far south of the reserve) **lesser fat-tailed jerboa**.

Around Petropavl there are lots of *kolki* (dense birch groves); larger ones had **northern white-breasted hedgehog**, **large-toothed Siberian shrew**, **Daubenton's myotis**, **least weasel**, **pine marten**, **Siberian roe deer** (heavily poached), **moose** (numbers highly variable), **northern birch mouse**, **northern red-backed vole**, and **mountain hare**. In the eastern part of

the grasslands there are islands of pine forests on rocky hills. One of them, Burabai National Park near Kokshetau, is said to have **wolf** and **lynx**. On a winter day there in 1989 I saw **Siberian red deer** and **red squirrels**, plus tracks of **pine marten**, **boar**, **moose**, and **Siberian roe deer** in fresh snow. Bayan Aul National Park near Ekibastuz has similar fauna.

In the south the grasslands turn into semi-desert dominated by *tyrsa* (dwarf feathergrass) and *polyn'* (sagebrush). This area hasn't been ploughed and is in much better shape. Korgalzhyn Nature Reserve southwest of Astana was a good place (in June 1991) to look for typical mammals of this zone, such as **corsac fox**, **steppe polecat**, **thick-tailed three-toed**, **Siberian**, and **greater jerboas**, **southern birch mouse**, **social vole**, **black-bellied**, **Eversmann's**, **Jungarian** and **grey hamsters**, **steppe lemming**, and **steppe pika**. There are also **least weasels** and **European water voles** in wetland areas. Lake Zaisan is one of the windiest places in Asia; Soviet Army officers considered it the worst possible place to serve in. But it is great for small mammals: in April 1990 I found a shrew on the lakeshore that I think was a very rare **Siberian shrew**. There were also **long-tailed ground squirrels**, **dwarf fat-tailed** and **thick-tailed pygmy jerboas**, **Siberian zokors**, and a **yellow steppe lemming**. The latter species was abundant throughout Kazakhstan in the 19th century, but then completely disappeared west of Lake Zaisan for unknown reasons, although it is still common in China and Mongolia; a few bones were found in raptor pellets throughout Kazakhstan in the last sixty years, adding to the mystery.

Deserts

About a half of Kazakhstan is desert, mostly dominated by sagebrush. Common and widespread mammals include **long-eared hedgehog**, **piebald shrew**, **red** (ssp. *alpherakyi*) and **corsac foxes**, **red-cheeked ground squirrel** (only in the east), **tamarisk**, **mid-day** and **Libyan jirds**, **great gerbil**, **dwarf fat-tailed** and **small five-toed jerboas**, **gray hamster**, **Zaisan mole vole** (east of the Aral Sea), and **Cape hare** (of *tolai* ecotype). **Wolf**, **wildcat**, **steppe** and **marbled polecats**, and **Asian badger** are also widespread but rarely seen. Sandy areas tend to have more mammals than clay or gravel deserts, but some species such as **saiga antelope**, **wild sheep** and **Siberian jerboa** avoid sands.

The northern and northeastern shores of the Caspian Sea are mostly sandy. **Piebald shrew** is particularly common here; try tracking or pitfall trapping using barriers. **Saiga** occurs west of the Ural River. In late January, **Caspian seals** breed on ice floes; in cold winters you can reportedly drive out onto the ice to look for them. Look also for **yellow** and **little ground squirrels**, **northern three-toed jerboa**, **Kazakhstan blind mole** (around Atyrau), **tamarisk** and **mid-day jirds**, and **greater gerbil** (east of the Ural River; colonies appearing on the western side are regularly exterminated).

Mangyshlak Peninsula is the most unpleasant-looking part of Kazakhstan, studded with endless oil and gas rigs. From Kanga near Fort Shevchenko you could arrange boat trips to offshore islands where **Caspian seals** haul out in April-June. The only other reason to visit Mangyshlak is a small population of weird-looking **Bactrian camels** that hang out between Zhanaozen and the Turkmenian border: they were always thought to be feral, but recently there's been rumors that they are truly wild and represent the real ancestors of domestic Bactrians (the *havtgai* of Mongolia are too genetically distant). A bit farther east, on the borders with Turkmenistan and Uzbekistan, is Ustyurt Plateau, extremely flat and open. Its edges are formed by long cliffs (*chinks*), quite spectacular in some places. Cheetah occurred here until the 1950s. In April 1991, the remote Ustyurt Nature Reserve had **Botta's serotine**, **Nepal myotis** (look for both in abandoned buildings), **desert long-eared bat** (roosting in the chinks), **red** and **corsac fox**, **wildcat**, **goitered gazelle**, **saiga antelope**, **urial sheep** (ssp. *arkal*), **yellow ground squirrel**, **lesser fat-tailed**, **thick-tailed three-toed** and **Severtzov's jerboas**, **Libyan jird**, **grey hamster**, **northern mole-vole**, **tolai hare**, and reportedly **honey badger**, **wolf**, **sand** and **Pallas's cats**, and **caracal**.

The Kazakh part of the Aral Sea has been somewhat revived recently, although it's too late for its endemic fishes. Barsakelmes Nature Reserve (formerly an island) is said to have **onager**, **goitered gazelle**, and **pallid pygmy jerboa**. The northern shore is a good place to look for **piebald shrew**, **Savi's pipistrelle** (rare and local in Kazakhstan; try old tombs near Shankar), **yellow ground squirrel**, and **lesser fat-tailed**, **pallid pygmy** (rare) and **thick-tailed three-toed jerboas**.

The core area of the country is the Kazakh Uplands, known in Russian as *melkosopochnik* ("the land of small hills"), the last remnants of a large mountain range that eroded away. The northwestern outpost of this unusual, beautiful land is the isolated Ulytau Mountains, virtually never visited by anybody. In July 1992, old tombs in the foothills had **Bobrinsky's serotines** (a rare species I've never seen elsewhere). There were also **wolves**, **saigas**, **Siberian**, **Severtzov's**, **small five-toed**, **lesser fat-tailed**, **dwarf fat-tailed**, and **thick-tailed three-toed jerboas**, **little ground squirrels**, **social voles**, and **steppe pikas**; higher up I found **wild sheep** (ssp. *collium*, alternatively classified as urial or argali), which reportedly still occur there. Another part of the Uplands is Betpak Dala Desert, accessible by driving west from Priozersk on Lake Balkhash. It is inhabited by **saiga**, **greater fat-tailed** and **thick-tailed three-toed jerboas**, **desert dormouse** (in patches of large *Xylosalsola arbuscula* saltbursh, locally called *boyalych*), and **steppe pika**. The eastern portion of the Uplands is north of Lake Balkhash. Look around Akshatau for **Pallas's cat**, **wild sheep** (also ssp. *collium*), **flat-headed vole**, **steppe lemming**, **gray marmot**, **greater jerboa**, **greater gerbil**, and **steppe** and **Kazakh pikas** (the latter recently described).

Lake Balkhash (fresh in the western half, salty in the east) is surrounded by great habitats on all sides. Its northeastern shore south of Sayak is one of the best places for **desert dormouse** and **five-toed pygmy jerboa** (very rare). Nearby Alakol Nature Reserve has similar fauna plus **long-tailed** and **red-cheeked ground squirrels** and **common vole**. The southern shore away from the massive reedbeds is mostly sandy. Karaoy was a good base for exploring the largest sand patch called Saryesik-Atyrau Desert. Look for **goitered gazelle** (rare), **long-clawed ground squirrel**, and **Severtzov's, small five-toed, northern three-toed, Lichtenstein's, and pallid pygmy jerboas** (the latter was very difficult to find).

Altyn Emel National Park, easily accessible from Almaty, has Kazakhstan's largest **onager** herd, **goitered gazelle**, **yellow** and **Brandt's ground squirrels** and **greater fat-tailed jerboa**. Reintroduction of **Przewalsky's horse** is underway. Chu River Valley, famous for vast fields of wild cannabis, had similar small mammals plus **long-clawed ground squirrel** and **Vinogradov's jerboa**, which is difficult to find elsewhere (try Birlik-Khantau road). Kyzylkum Desert between Syr Darja River and Uzbek border had **Botta's serotine** (in abandoned buildings), **long-clawed ground squirrel**, **Severtzov's, northern three-toed, Lichtenstein's**, and (reportedly) **Heptner's pygmy jerboas**, and possibly **sand cat** and **caracal**.

There are many rivers in the deserts of southeastern Kazakhstan. Their valleys are largely irrigated and inhabited mostly by agricultural pests such as **tamarisk** and **Libyan jirds, striped and Urals field mice, house mouse, and Norway rat**. Where *tugai* (riparian thickets) and *plavni* (large areas of reeds) survive, you might find **lesser white-toothed shrew, golden jackal, least weasel, boar, European water vole, and coypu** (introduced). Try Alakol Nature Reserve and Ili River Delta near Lake Balkhash (Zhydeli is a good access point). **Common pipistrelle, yellow ground squirrel**, and possibly **jungle cat** occur along Syr Darja River; the best sections are above Kyzylorda and, reportedly, below Ayteke Bi.

Mountains

Mountains of Kazakhstan have lots of interesting mammals, but finding larger species can be very difficult. **European water shrew, common noctule, Nepal myotis, Eurasian otter, stone marten, ermine, least weasel, Asian badger, brown bear, red fox** (ssp. *ochroxantha*), **lynx** (sspp. *lynx* in the Altai and *isabellinus* elsewhere), **snow leopard, boar, Siberian ibex, Siberian roe deer, forest dormouse, red squirrel** (introduced in the Tien Shan), **gray marmot, narrow-headed vole, and tolai hare** still occur on all major ranges, but don't expect to see them all in one week, or even one month. **Gobi serotine** and **social vole** are widespread in arid foothills, and **common vole** in cultivated areas.

The small portion of Altai Mountains that belongs to Kazakhstan is inhabited by many mammals not found elsewhere in the country: **Ognev's big-eared bat, Brandt's and Ikonnikov's myotis, wolverine, sable, Siberian musk deer, Korean field mouse, large-eared vole, and Alpine pika**. All of them are rare and more easily found in Russia or Mongolia. In June 1990 I spent two days in Markakol Nature Reserve, and saw **Laxmann's shrew, Altai weasel, Siberian red deer, long-tailed ground squirrel, Siberian chipmunk, grey birch mouse, flat-headed, tundra, and northern red-backed voles, and mountain hare**. Batys Altai Nature Reserve is said to be better for **moose, lynx, brown bear, and Siberian flying squirrel**; I found **Siberian mole, Altai birch mouse** (both in tallgrass meadows), **flat-headed vole** (on gravelly hilltops), incredibly tiny **Roborovski's hamster** (in sandy foothills), and **Siberian zokor** (near the office) in one day.

Jungar Alatau is a long, ragged mountain range along the Chinese border, connected to Tien Shan but with some Altai species such as **long-tailed ground squirrel, tundra vole, and mountain hare**. It has no easy access and is seldom visited; there is a **pika** population in the section about 20 km south of Amanbokter that might be an undescribed species.

Tien Shan Mountains are easily accessible from Almaty. Many people get their first taste of Tien Shan by visiting Medeo, a good place to look for **Tien Shan shrew, red squirrel, Tien Shan birch mouse, Urals field mouse, northern red-backed, narrow-headed and Kazakhstan voles, and Turkestan red pika**. **Lesser rock shrew** has been recorded, too. Higher up you might find **snow leopard** (reportedly still occurring in adjacent Almaty Nature Reserve), **argali sheep** (ssp. *nigromontana*, now extremely rare), **Tien Shan red deer, Siberian ibex, and silver mountain vole**. Kurdai Pass on the border with Kyrgyzstan used to be a great place for foothill species: in March 1989 I briefly saw a **marbled polecat** there, and also found **Gmelin's shrew, common pipistrelle, and social vole**. But now there is a new town on the border, so everything is probably gone. Charyn National Park farther east protects a large Utah-style canyon. Its tributary Temirlik Canyon is even better: I've seen **wildcat, Rall's and Tien Shan ground squirrels, small five-toed and Siberian jerboas, greater gerbils, and Zaisan mole-voles** there, and found **Indian porcupine** quills. Bayankol near the Kyrgyz border is a good base for hikes into the mountains where **Altai weasel, gray marmot, and large-eared pika** occurred in June 1992.

In far western Tien Shan, Karatau Nature Reserve in the mountains of the same name has the largest herd of **argali** ssp. *nigromontana*, still easy to see in June 1992 but now nearly extinct. **European freetail, Gobi serotine, and stone marten** were common in rocky canyons. Aksu Zhabagly Nature Reserve and adjacent Sairam Ugam National Park near Shymkent are said to have **Bokhara and lesser horseshoe bats, lesser and Geoffroy's myotis, Siberian ibex, Indian porcupine, Tien Shan ground squirrel, Menzbier's and long-tailed marmots, Himalayan rat, and Turkestan red pika**.