SNOW LEOPARD BIBLIOGRAPHY CENTRAL ASIA

(Abstracts)



By Emilia Vashetko, Alexander Esipov, Elena Bykova and Elena Kreuzberg

SUMMARY

Bibliography of the Snow Leopard included publications on the studying various questions of ecology and conservation of the Snow Leopard in Central Asia (305) for the period 1873 to 2004. The most important works on this species in the region, as well as results of the analysis of timing of publications was described.

Project supported by International Snow Leopard Trust (ISLT), was carried out in 2004-2005.

Reference Type:

Author, Analytic (01): Abdulnazarov A. G.

Title, Analytic (04): About status of the Red Book vertebrates in the Zorkul nature reserve.

Journal Title (10): Ecologic features of biological diversity. Proceedings of the second international scientific conference.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 5-6

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In the nature reserve, there are 18 animal species listed in the Red Book of the Republic of Tajikistan including 8 mammal species, one of which, snow leopard, is in the Red List of IUCN. There are 10 Red Book bird species in the nature reserve. Pamir argali is represented by several dozens of isolated groups. No encounters of Tien Shan brown bear, dhole and lynx have been reported in the nature reserve over the last years. A total number of mountain geese were about 400, in the year 2001. Mongolian saker falcon was met twice. Two golden eagles and six lammergeyers were found too.

Keywords (45): Tajikistan/ Zorkul nature reserve/ Pamir argali/ rare species/ snow leopard.

Reference Type:

Author, Analytic (01): Abdunazarov B. B.

Title, Analytic (04): Rare and endangered animal species in the Kashkadaraya region.

Journal Title (10): Behavioral ecology (Animals and soil ecology).

Date of Publication (20): 1994

Volume ID (22):

Location in Work (25): 3

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): 41 percent of all vertebrate species listed in the Red Book of the Uzbek SSR (18 – mammal species, 29 bird, 6 – reptile, and 8 fish species) inhabit the Kashkadarya region. The mammals are Tien Shan brown bear, Central Asian otter, Turkistan lynx, snow leopard, and goitered gazelle. Nesting bird fauna includes the following species: black stork, Turkistan white stork, short toed eagle, booted eagle, golden eagle, bearded vulture, black vulture, griffon vulture, saker falcon, houbara bustard, and eagle owl. Migrating and wintering bird species are dalmatian pelican, rose pelican, mute swan, osprey, tawny eagle, imperial eagle, pin-tailed sandgrouse; and possibly Bonnli's eagle and Barbary falcon that have not been seen here since 1950-s. Rare reptiles are represented by two species: desert monitor and Central Asian cohra

Keywords (45): Uzbekistan/ Kashkadarya region/ rare species/ mammals/ birds/ reptiles/ fishes/ snow leopard.

Reference Type:

Author, Analytic (01): Abdunazarov B. B.

Title, Analytic (04): Biodiversity of mammals in the Western Tien Shan and its conservation.

Journal Title (10): Biodiversity of the Western Tien Shan: protection and sustainable use.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 22-23

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The mammal fauna of Uzbekistan's mountain ecosystems is represented by some 60 species. Data on mammal species composition in the Western Tien Shan (48 species) and Pamir-Alai (57 species) is given. A quantity of species endemic to the mountainous ecosystems of Uzbekistan is defined. Quantities of nine rare species inhabiting the mountain ecosystems, including snow leopard, are given. Number of snow leopard in Pamir-Alai and the Western Tien Shan is estimated to be 30-50 animals.

Keywords (45): Uzbekistan/ biodiversity/ mammals/ mountain ecosystems/ Western Tien Shan/ Pamir-Alai/ endemic/ number/ human influence/ illegal hunting/ habitat degradation/ snow leopard.

Reference Type:

Author, Analytic (01): Abdunazarov B.B.

Title, Analytic (04): Snow Leopard.

Journal Title (10): Guide of Animals listed in CITES.

Date of Publication (20): 2003

Volume ID (22):

Location in Work (25): 6

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard (*Uncia uncia*) listed in Red Data Book of Republic of Uzbekistan (2003) and Appendix II CITES.

Keywords (45): Uzbekistan/ CITES/ snow leopard.

Reference Type:

Author, Analytic (01): Abdunazarov B.B.

Title, Analytic (04): Number of some species of rare mammals of Uzbekistan.

Journal Title (10): Mammals of the Russia and neighbouring countries. Proceedings of the

conference.

Date of Publication (20): 2003

Volume ID (22):

Location in Work (25): 11

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It gives expert assessment of number for the rare mammals from Uzbekistan: Tien Shan brown bear (600), Central Asian otter (100), Turkestan lynx (100-150), snow leopard (30), Severtzov's argali (2500), Bukhara urial (200), markhor (300), Menzbier's marmot (22,000). All species included in Uzbek Red Data book.

Keywords (45): Uzbekistan/ rare mammals/ number/ snow leopard.

Reference Type:

Author, Analytic (01): Abdunazarov B. B., Esipov A. V., Aripdjanov M. R., Taryannikov V. I., Khodjaev A. F., Esipov V. M.

Title, Analytic (04): Composition, structure and population of rare terrene vertebrate animals and their conservation perspectives in the nature reserves of Uzbekistan.

Journal Title (10): The nature reserves of the USSR – the present and future.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 182-184

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): An attempt of analyzing the role of Uzbekistan' nature reserves in conservation of gene pool of the rare and endangered terrene vertebrate fauna is done. Of 21 rare vertebrate species, 11 mammal species, eight nesting bird species and two reptile species were detected to inhabit seven nature reserves. This makes up 36.2 percent within the total number of species included in the Red Data Book of the Uzbek SSR or 3.7 percent – of the country's fauna. Single snow leopards were found in the Chatkal and Hissar nature reserves. Data of the species inhabiting the Zaamin nature reserve needs to be verified.

Keywords (45): Uzbekistan/ protected areas/ vertebrates/ endangered species/ snow leopard.

Reference Type:

Author, Analytic (01): Abdunazarov B. B., Aromov B., Lanovenko Ye. N., Zinoviev S. A.,

Peregontsev Ye. A.

Title, Analytic (04): A role of the Hissar nature reserve in conservation of rare and

endangered animals.

Journal Title (10): The organism and environment. Materials of the second national

symposium.

Date of Publication (20): 1995

Volume ID (22):

Location in Work (25): 126

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Two amphibian species, 11 – reptiles, 205 bird species (52 percent of which are nesting species) and 32 mammal species were reported to inhabit the Hissar nature reserve. The following rare species were recorded to inhabit the nature reserve: Tien Shan brown bear, Central Asian otter, Turkistan lynx, snow leopard, black stork, golden eagle, bearded vulture, black vulture, Himalayan griffon, saker falcon, and

Central Asian cobra.

Keywords (45): Uzbekistan/ Hissar nature reserve/ vertebrates/ snow leopard.

Reference Type:

Author, Analytic (01): Abdusalyamov I. A.

Title, Analytic (04): A perspective development of fur-animal farming and fish industry in

the Tajik SSR.

Journal Title (10): Proceedings of the Institute of Zoology and Parasitilogy of the

Academy of Science of the Tajik SSR.

Date of Publication (20): 1972

Volume ID (22):

Location in Work (25): 155-160

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Given are data concerning fur-trade in Tajikistan in 1962 – 1966. Snow

leopard trade reduced from 54 animals (1962) to 12 (1966). Given are recommendations for the establishment of a highland nature reserve in

Pamir and the Sary Khosor nature reserve in the Vakhsh ridge.

Keywords (45): Tajikistan/ fur-trade/ snow leopard/ conservation measure.

Reference Type:

Author, Analytic (01): Abdusalamov I.A., Mirzobakhodurova Sh.R.

Title, Analytic (04): Required protection measures for rare and endangered vertebrate

species in Tajikistan.

Journal Title (10): News of the Academy of Science of Tajikistan.

Date of Publication (20): 2001

Volume ID (22): N 2 (143)

Location in Work (25): 40-48

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The network of Tajikistan's protected areas (four nature reserves, 14 national and 18 regional sanctuaries, one national park) is described. The establishment of 'Shakhristan state complex nature reserve' and 'Sarykamish state complex reserve', and interstate nature complex park on northern slope of the Turkestan ridge is recommended to improve conservation practices for a number of endangered vertebrate animal species in Northern Tajikistan (such as brown bear, snow leopard, wild

sheep, and others).

Keywords (45): Tajikistan/vertebrates/ protected areas/ endangered species/ snow

leopard.

Reference Type:

Author, Analytic (01): Abramov V.K.

Title, Analytic (04): Ecological basis of the conservation of large predators in USSR.

Journal Title (10): Proceedings of 1st International Congress on mammals.

Date of Publication (20): 1974

Volume ID (22): Vol.I.

Location in Work (25): 7-8

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Problems of conservation of large predators (*Felis tigris* L., *Panthera pardus* L., *Felis uncia* Schreb., *Acinonyx jubatus* Schreb., *Hyaena hyaena* L., *Cuon alpinus* Pall., *Ursus maritimus* Phipps, *U.tibetanus*

Cuv.) inhabiting territory of USSR are discussed.

Keywords (45): USSR/ large predators/ conservation problems/ snow leopard.

Reference Type:

Author, Analytic (01): Abzalov A. A.

Title, Analytic (04): Game management development.

Journal Title (10): Nature and man.

Date of Publication (20): 1974

Volume ID (22):

Location in Work (25): 20 – 24

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): An issue of wildlife conservation in game preserves, forestries, and sanctuaries is discussed. In some regions of Uzbekistan there are various protected wildlife areas preserving unique and game species: marchor – in the Kugitan hunting farm, Bukhara deer – the Bukhara region, bear and snow leopard, argali, ibex, wild-boars, snow-cock, partridge, eagle, etc. – in the Miraki hunting farm, pheasants – in the Karadara forestry. To restore and upgrade the game management level in the country it is required to properly create game preserves, enlarge reproduction activity, strictly follow rules and terms of hunting and cultivate careful and solicitous attitude to wildlife and its resources in all hunters.

Keywords (45): Uzbekistan/ hunting farm/ zakaznik/ nature conservation/ game species/ snow leopard.

Reference Type:

Author, Analytic (01): Abzalov A. A., Diakin B. I., Ishunin G. I.

Title, Analytic (04): Principles of the nature reserve establishment in Uzbekistan.

Journal Title (10): Regional problems of sustainable use and protection of biosphere.

Proceedings of first session of the scientific council of the

Academy of Science of the Uzbek SSR.

Date of Publication (20): 1976

Volume ID (22):

Location in Work (25): 20-22

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides a brief description of nature reserves network in Uzbekistan: Karakul and Vardanza (in desert); Chatkal, Zaamin, Nurata, and Kyzylsu (in mountains); Aralpaigambar, Kyzylkum, Badaitugai, Zeravshan (riverine forests). Snow leopard is

protected in the Chatkal, Zaamin, and Kizilsu nature reserves.

Keywords (45): Uzbekistan/ nature protected areas network/ nature conservation/ flora/

fauna/ deserts/ mountain/ river forest/ snow leopard.

Reference Type:

Author, Analytic (01): Afanasiev Yu. G., Gubanov B. A.

Title, Analytic (04): The Karatau nature reserve.

Journal Title (10): New nature reserves of Kazakhstan.

Date of Publication (20): 1988

Volume ID (22):

Location in Work (25): 20-33

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The Karatau ridge is an extreme north-west spur of the Tien Shan mountain system. Flora of Karatau is represented by no less than 1,500 higher vessel plant species. Karatau and the adjacent areas host 16 reptile species, 114 – bird and 42 mammal species. Snow leopard disappeared from fauna of Karatau in 20th century. In 1940-s, the animal species was met at the highest point of the ridge in the Manjilki area, particularly in tract Kor-Djailau. Now there are no snow leopards in the area under study – a fact evidenced by local hunters and shepherds.

Keywords (45): Kazakhstan/ Karatau nature reserve/ plants/ animals/ snow leopard.

Reference Type:

Author, Analytic (01): Aizin B. M.

Title, Analytic (04): Siberian ibex — Capra sibirica Pall.

Journal Title (10): Game species of Kyrgyzstan.

Date of Publication (20): 1969

Volume ID (22):

Location in Work (25): 98-105

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes status of ibex in Kyrgyzstan, its distribution, behavioral patterns, enemies and competitors, etc. The enemies of ibex are snow leopard and wolf. All year round snow leopard preys on ibex – its main food object – and, therefore, should there be ibexes, snow leopards would be somewhere around. In winter, a considerable number of ibex dies from wolves. Sometimes dogs prey on ibex, too. Golden eagles and bearded vultures prey on young ibexes. However, poachers remain the most dangerous enemy.

Keywords (45): Kyrgyzsatn/ Siberian ibex/distribution/ life history/ diet/ predators/ snow leopard.

Reference Type:

Author, Analytic (01): Aizin B. M.

Title, Analytic (04): Distribution, number and seasonal behavioral patterns of *Panthera*

uncia Scheber in Kyrgyzstan.

Journal Title (10): Proceedings of the 1st international congress on mammals.

Date of Publication (20): 1974

Volume ID (22): Vol. 1.

Location in Work (25): 19-20

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Kyrgyzstan, snow leopard can be met almost in all mountain ridges

(Kok-Kiya, Atbasha, Kyrgyz, Terskey, Kungei, Talas, Chatkal, Alai, Zaalai), where it keeps to alpine meadow, woodless rock and snowfield zones. The number of snow leopard does not exceed 1,500 animals.

Seven to 10 animals are annually caught for the needs of zoo-export.

Keywords (45): Kyrgyzstan/ snow leopard/ distribution/ number/ trade.

Reference Type:

Author, Analytic (01): Aizin B. M.

Title, Analytic (04): Rare predatory mammal species and their protection in Kyrgyzstan.

Journal Title (10): Ecologic fundamentals of predatory mammals' protection and sustainable use.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 4-5

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard is met in all mountain ridges in Kyrgyzstan. Every year 7 – 10 animals are caught for the purpose of zoo export. Total population of snow leopard in the country does not exceed 1,400 animals.

Keywords (45): Kyrgyzstan/ snow leopard/ distribution/ number/ trade.

Reference Type:

Author, Analytic (01): Aizim B. M., Shukurov E. D.

Title, Analytic (04): Snow leopard — Felis uncia Schreb.

Journal Title (10): Game species of Kyrgyzstan.

Date of Publication (20): 1969

Volume ID (22):

Location in Work (25): 56-59

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It says about snow leopard in Kyrgyzstan, its distribution, number, food, reproduction, and hunting behavioral patterns, and encounters with human beings. The only enemy of snow leopard is man. From economic point of view snow leopard is of interest only in terms of catching the animals for zoo-export. The skin of snow leopard in commercial trade is of negligent importance. Local population uses the skins for decorating walls, tailoring man's fur coats and sometimes as floor carpets.

Keywords (45): Kyrgyzstan/ snow leopard/ distribution/ number/ trade.

Reference Type:

Author, Analytic (01): Aizin B.M., Vorobiev V.G., Vyrypaev V.A., Markov P.A., Toktosunov

A.T., Fedyanina T.Sh., Shukurov E.J.

Title, Analytic (04): Snow leopard.

Journal Title (10): Red Data Book of the Kyrgyz SSR.

Date of Publication (20): 1985

Volume ID (22):

Location in Work (25): 22-23

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard is a rare and endangered species, distributed in all mountain ridges of Kyrgyzstan. Its population is 1,400 animals, density being 0.2 – 0.5 animal per 1,000 ha. Its population was noticed to decrease in some ridges because of decreasing populations of mountain ungulates. 200 snow leopards were caught for the purpose of zoo-export over the last 20 years. This species is protected in the nature

reserves Sary Chelek, Besh Aral, and natural park Ala Archa.

Keywords (45): Kyrgyzstan/ Red Data book/ snow leopard/ status/ distribution/ biology/ number/ fluctuation/ protection.

Reference Type:

Author, Analytic (01): Allabergenov K.

Title, Analytic (04): Snow leopard or ilvirs.

Journal Title (10): Vecherniy Tashkent Newspaper.

Date of Publication (20): 1986

Volume ID (22): № 122 (6. 013)

Location in Work (25):

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Uzbekistan, snow leopard can be found in the Turkistan and Gissar ridges, in the mountains of Zaami, and in the Kurama, Chatkal and Ugam ridges. Here it keeps at up to 3,000 – 4,000 m above sea level. Snow leopard feeds upon wild ungulates – ibex and sheep, and sometimes attacks livestock but never man. A brief information concerning peculiarities of snow leopard biology and behavioral patterns is provided.

Keywords (45): Uzbekistan/ distribution/ habitats/ diet/behavior/ snow leopard.

Reference Type:

Author, Analytic (01): Allabergenov K.

Title, Analytic (04): The cat family.

Journal Title (10): Mammals included in the Red Data Book.

Date of Publication (20): 1991

Volume ID (22):

Location in Work (25): 16-23

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides field signs and brief comparative characteristic of cat species in Uzbekistan, five of which are included in the Red Data Book of Uzbekistan and the USSR: lynx, caracal, manul, snow leopard and cheetah. Snow leopard is protected in the Zaamin, Chatkal, and Gissar nature reserves. A snow leopard female bears up to five cubs (normally two – three) once in two years. Gestation period is 90 days. Female suckles her cubs until they reach the age of three –four months.

Keywords (45): Uzbekistan/ Red Data book/ endangered mammals/ cats/ snow leopard.

Reference Type:

Author, Analytic (01): Allabergenov K.

Title, Analytic (04): Predator that will never attack a man.

Journal Title (10): Vecherniy Tashkent Newspaper

Date of Publication (20): 1991

Volume ID (22): № 207 (7. 896)

Location in Work (25):

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Irbis is a very endangered species in Uzbekistan. The article provides a brief description of the snow leopard appearance and distribution. Reasons for reduction of snow leopard population is reduction of ungulate populations it preys on – ibex and wild sheep – and anthropogenic disturbance. Hunting for snow leopard is prohibited everywhere.

Keywords (45): Uzbekistan/ distribution/ number/ diet/behavior/ snow leopard.

Reference Type:

Author, Analytic (01): Alibekov L. A., Nishanov S. A.

Title, Analytic (04): Fauna.

Journal Title (10): Natural conditions and resources of the Jizak region.

Date of Publication (20): 1978

Volume ID (22):

Location in Work (25): 192-195

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Represented is fauna of big salt-marsh valleys and pre-Kyzylkum area, a tier of low desert foothill valleys, tiers of lowland ridges, deeply cut hillside midlands, and cold highlands of the watershed ridge-top tier in the Jizak region of Uzbekistan. The highest tier of the Jizak region, a habitat of snow leopard, Menzbier's marmot, Siberian ibex, sometimes wild Tajik sheep coming from the East, bear ascending from lower elevations, and wolf in summer, has the most adverse living conditions. Central Asia argali and stone marten inhabit in central part of the North Nurata ridge.

Keywords (45): Uzbekistan/ Jizak region/ fauna/ landscape/ biotic factors/ fishes/ reptiles/ birds/ insects/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Allayarov A. M.

Title, Analytic (04): Materials on geographical distribution of wild cats in Uzbekistan.

Journal Title (10): Proceedings of third all-Union meeting on zoogeography of land.

Date of Publication (20): 1963

Volume ID (22):

Location in Work (25): 15-16

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes the distribution and habitats of eight Felidae species in Uzbekistan, such as snow leopard, leopard, lynx, caracal, chaus,

manul, sand cat, and steppe cat.

Keywords (45): Uzbekistan/ Felidae/ distribution/ habitats / snow leopard.

Reference Type:

Author, Analytic (01): Akimushkin I.

Title, Analytic (04): Snow leopard or irbis.

Journal Title (10): Animal kingdom.

Date of Publication (20): 1971

Volume ID (22):

Location in Work (25): 210-211

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The biology of snow leopard is described in a popular form. Information of distribution, behavior and reproductive biology, etc. is

given.

Keywords (45): USSR/ snow leopard/ distribution/ behavior/ reproduction.

Reference Type:

Author, Analytic (01): Akimushkin I.

Title, Analytic (04): Snow leopard or irbis.

Journal Title (10): Animal kingdom. Mammals or animals.

Date of Publication (20): 1988

Volume ID (22):

Location in Work (25): 139-140

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard behavioral patterns, food preferences, and reproduction are described in a popular way. The population of snow leopard is defined to be 1,000 animals. A reason for the population decline is

hunting for the sake of beautiful fur.

Keywords (45): USSR/ snow leopard/ number/ /food/ behavior/ reproduction/ threats.

Reference Type:

Author, Analytic (01): Ammosov, Bekeev, Voilochnikov A. T., Vorobyova M. P., Grakov N.

N., Deryagin V. N., Karpukhin I. P., Kosakov G. K., Korytin S. A., Larin B. A., Larin S. A., Mapakov S. V., Mikhailovskiy E. V.,

Nikultsev A. P., Pavlov M. P., Stakhrovskiy Ye. V., Yazan Yu. P.

Title, Analytic (04): Central Asia mountains. Snow leopard or irbis.

Journal Title (10): Hunting industry of the USSR.

Date of Publication (20): 1973

Volume ID (22):

Location in Work (25): 92-93, 227

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): All natural zones are represented in the mountains of Central Asia: deserts, semi-deserts, steppes, meadows, forests and shrubs, sub-alpine zones, alpine zones. Irbis (snow leopard) is a typical inhabitant of highlands. In the USSR, snow leopard is distributed in the mountains of Central Asia and southern Siberia. Outside the country this species is met in the Himalayas, Tibet, mountains of Mongolia. It is rare everywhere. The annual world trade is less than 1,000 animals. Being a non-numerous species, it causes negligible damage to farming and hunting industry.

Keywords (45): Central Asia/ natural zones/ snow leopard/ distribution/ habitats/ number/ trade.

Reference Type:

Author, Analytic (01): An E. S., Botman K. S., Goncharov V. E., Dudura I. M.,

Kulbashnaya L. Ya.

Title, Analytic (04): The Chatkal Mountain Forest State Nature Reserve. The Kyzylsu

Mountain Juniperous State Nature Reserve. The Miraki State

Nature Reserve.

Journal Title (10): Protected areas of Uzbekistan.

Date of Publication (20): 1980

Volume ID (22):

Location in Work (25): 19-21, 27-32.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes natural conditions, area, flora and fauna of the three mountain nature reserves in Uzbekistan: Chatkal, Kyzylsu, and Miraki. Siberian mountain ibex, roe deer, wild boar, Turkistan lynx, Tien Shan brown bear, fox, stone marten, Menzbier's marmot, porcupine, ermine, and Tien Shan souslik inhabit the Chatkal nature reserve. Snow leopard can be found in a top rocky part of the ridge. In the Kyzylsu nature reserve, there are 23 mammal species including, among the others, white-clawed bear, snow leopard, Iranian otter, Turkistan lynx, wild-boar, badger, porcupine, long-tailed marmot, hare-tolai, stone marten, Pamiri shrew, and ibex; in the Miraki nature reserve snow leopard, white-clawed bear, ibex, wolf, fox, porcupine, long-tailed marmot, hare-talai, forest dormouse, red pica, and a number of Red Data Book bird species are protected.

Keywords (45): Uzbekistan/ mountain nature reserves/ Western Tien Shan/ Pamir-Alai/ Hissar ridge/ Chatkal nature reserve/ Kyzylsu nature reserve/ Miraki nature reserve/ relief/ climate/ soil/ flora/ fauna/ mammals/ birds/ reptiles/ fishes/ territorial protection/ rare species/ snow leopard.

Reference Type:

Author, Analytic (01): Andrienkov V. I.

Title, Analytic (04): The Besh Aral nature reserve.

Journal Title (10): Nature reserves of Central Asia and Kazakhstan.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 335

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides general information about the Besh Aral nature reserve (Kyrgyzstan), its physico-geographical characteristic, and description of flora and fauna. The predatory mammals are represented by 12 species. The rare predators are brown bear, snow leopard, lynx, and manul. Snow leopard inhabits the highlands of Chatkal depression and the upper-river Kara-Toko. In the past, snow leopards were seen more

Keywords (45): Kyrgyzstan/ Besh Aral nature reserve/ location/ climate/ soil/ flora/ fauna/ snow leopard.

Reference Type:

Author, Analytic (01): Aripjanov M. P., Esipov A. V.

Title, Analytic (04): Rare mammals of South-West Tien Shan.

Journal Title (10): Environmental problems of wildlife protection.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 80-81

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Rare mammal species such as free-toiled bat, Menzbier's marmot (endemic to the Western Tien Shan), Tien-Shan brown bear, Central Asian otter, Turkestan lynx, snow leopard, and wild sheep inhabit the South-West Tien-Shan (Uzbekistan). Brief data on

animal encounters and main threats are given.

Keywords (45): Uzbekistan/ South-West Tien-Shan/ rare species/ snow leopard/ population/ species number/ poaching/ human activity.

Reference Type:

Author, Analytic (01): Aristov A.A., Baryshnikov G.F.

Title, Analytic (04): Genus Irbises – Uncia Gray, 1854. Irbis or snow leopard – Uncia uncia

(Schreber, 1775)

Journal Title (10): The mammals of Russia and adjacent territories. Carnivores and

Pinnipeds.

Date of Publication (20): 2001

Volume ID (22):

Location in Work (25): 329-336

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): An identification table for genus and species of mammals of Russia and adjacent areas is given. The taxonomy, morphology, distribution and life history of carnivores are described. The

features of genus *Uncia* and species *Uncia uncia*, geographical variability, distribution, biology and value are described in detail.

Keywords (45): Russia and adjacent areas/carnivores/ snow leopard/ taxonomy/

morphology/ distribution/ biology.

Reference Type:

Author, Analytic (01): Aromov B.

Title, Analytic (04): Materials on background animals of the Kyzylsu nature reserve.

Journal Title (10): Protection and reproduction of fauna.

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 9-10

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Given are data concerning mammals in the Kyzylsu mountain juniperous nature reserve (north-west extremities of the Hissar ridge) in Uzbekistan 1979 through 1981. It describes habitats and provides data on rare and endangered species populations such as Tien-Shan brown bear, Turkistan lynx, snow leopard, Central Asian otter, golden eagle, bearded vulture, Himalayan vulture; and game species such as long-tailed marmot, porcupine, badger, Siberian ibex, Himalayan snow-cock, chukar, etc.

Keywords (45): Uzbekistan/Hissar ridge/ Kyzylsu nature reserve/ mammals/ rare species/ snow leopard/ game species/ habitats/ species number.

Reference Type:

Author, Analytic (01): Aromov B.

Title, Analytic (04): The Biology of the Snow Leopard in the Hissar Nature Reserve.

Journal Title (10): Proceeding of 8th International Snow Leopard Symposium –

Islamabad.

Date of Publication (20): 1995

Volume ID (22):

Location in Work (25): 108-109

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The work contains data on biology snow leopard in Hissar nature reserve, Uzbekistan. The number of snow leopards in this reserve has increased from two or four in 1981 to between 13 and 17 individuals in 1994. Since 1981, snow leopards have been sighted 72 times and their tracks or pugmarks 223 times. In the Hissar Nature Reserve snow leopards largely feed on ibex. Over a period of 14 years, 92 kills and remains of ibex aged from one to thirteen years of age have been examined. Other records of predation, by the number of events observed, include 33 cases of juvenile and mature horses, 25 long-tailed marmot (Marmota caudata). 18 Himalayan snowcock (Tetraogallus himalayemis), 17 domestic goat, 13 wild boar (Sus scrofa), five domestic sheep and three incidents involving cattle. Twenty-two attacks on domestic flocks were reported, and these occurred during both the daytime and at night. Snow leopards usually mate between the 20th of February and March 20th. The offspring are born in late April to May, and there are usually two per litter

(23 encounters), although a single litter of three has also been recorded.

Keywords (45): Uzbekistan/ snow leopard/ Hissar Ridge/ Hissar nature reserve/ number/ diet/ breeding.

Reference Type:

Author, Analytic (01): Aromov B.

Title, Analytic (04): Snow Leopard (*Uncia uncia*) in Hissar Nature Reserve.

Journal Title (10): Proceeding of Nature Reserves in Uzbekistan.

Date of Publication (20): 2001

Volume ID (22): Issue 3.

Location in Work (25): 121-125

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Data on distribution, number, diet and breeding of snow leopard in NW spurs of the Hissar Ridge were collected over long-term studies in the span from 1981 to 1994. An increase in the number of this animal from 4 to 17 individuals has been recorded in the Hissar Nature Reserve (Uzbekistan).

Keywords (45): Uzbekistan/snow leopard/ Hissar ridge/ Hissar nature reserve/ number/ population estimate/ diet/ wild ibex/ livestock/ rut/ cubs/ competitors.

Reference Type:

Author, Analytic (01): Aromov B., An E.

Title, Analytic (04): Hissar state nature reserve.

Journal Title (10): Ecological news.

Date of Publication (20): 2004

Volume ID (22):

Location in Work (25): 143-145

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Presented is history of the Hissar nature reserve's establishment, physic and geographic description, types of soils, flora and fauna The 28 species of mammals, 103 nested birds, 19 amphibians and reptiles and 2 fishes are presented in nature reserve. Number of snow leopard assessed as 2-3 families, bear – 130 individuals, wild boar – 460, Turkestan lynx – 90,ibex – 1700 individuals.

Keywords (45): Uzbekistan/ Hissar nature reserve/ mammals/ birds/ amphibians/ reptiles/ number/ snow leopard/ lynx/ bear/ wild boar/ ibex.

Reference Type:

Author, Analytic (01): Artykbaev P. K., Bogdanov O. P., Meklenburtsev R. N.,

Mukhamediev A. M., Pavlenko T. A.

Title, Analytic (04): Fauna.

Journal Title (10): Uzbek SSR. Encyclopedia.

Date of Publication (20): 1981

Volume ID (22):

Location in Work (25): 51

Location/URL (38):

Notes (42):

Abstract (43): Uzbekistan's fauna includes 97 mammal species (insectivorous six species, Cheiroptera -20, hare type species -2, rodents -37, ungulates – 8); 379 bird species, of which 184 are passerine; 58 reptile species; 69 – fish species. Species inhabiting sand deserts, clay deserts, and mountains are listed. The following mammal species inhabit the alpine zone: bear, snow leopard, ermine, weasel, wolf, Siberian mountain ibex, wild sheep, Menzbier's marmot and long-tailed marmot, voles, red pica. The following game species are listed in the Red Book: bear, leopard, lynx, snow leopard, cheetah, caracal, otter, marbled polecat, goitered gazelle, Bukhara deer, marchor, and wild sheep (there are two wild sheep sub-species in the country – Bukhara and Kizilkum wild sheep).

Keywords (45): Uzbekistan/ fauna/ game species/ mammals/ birds/ reptiles/ desert/ geographical zones/ mountain semi desert/ mountain steppe/ alpine zone/ rare species/ snow leopard.

Reference Type:

Author, Analytic (01): Baidavletov R. J.

Title, Analytic (04): Large predators of the Kazakhstan Altai and their importance for

hunting industry.

Journal Title (10): Zoological studies in Kazakhstan.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 79-81

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Fauna of large predatory mammals in the Kazakhstan Altai is represented by five species: wolf, bear, glutton, lynx, and snow leopard. Snow leopard inhabits the Sarymsakty and Tarbagai ridges and South Altai. This species is observed to regularly penetrate into the Kutun and Kurchum ridges. Its habitat covers an area of 1,800 sq. km, its population being 14-16 animals. The population density is 0.7 – 1.0 animals per 100 sq. km. A hunting area of a female animal with two cubs is 45 – 85 sq. km; a male – 120 sq. km. Snow leopard main preys on ibex (41.1 percent), roe-deer (31.0 percent), and moral (13.8 percent); in summer – on gray marmot (28.6 percent). Snow leopard is also known to prey on hares, birds, argali, and elks.

Keywords (45): Kazakhstan/ Altai/ large predators/ snow leopard/ distribution/ number/ preys.

Reference Type:

Author, Analytic (01): Bannikov A.G.

Title, Analytic (04): Mountains of Middle Asia and Kazakhstan.

Journal Title (10): Visiting of Soviet Union nature reserves.

Date of Publication (20): 1966

Volume ID (22):

Location in Work (25): 222-223

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The data on geographical location, plants and animals of mountain nature reserves of Middle Asia and Kazakhstan are given. Snow leopard and its preys (wild ibexes and sheep) were recorded in both Almaty and Aksu Jabagly nature reserves.

Keywords (45): Middle Asia/ Kazakhstan/ nature reserves/ plants/ animals/ snow leopard/ preys.

Reference Type:

Author, Analytic (01): Bannikov A. G., Vtorov P. P., Gladkova T. D., Drozdov N. N.,

Kuzyakin A. P., Naumov S. P., Novikov G. A., Rogachyova E. V.,

Tomilin A. G., Flint V. E.

Title, Analytic (04): Genus Panthera.

Journal Title (10): Life of animals. Vertebrates.

Date of Publication (20): 1971

Volume ID (22):

Location in Work (25): 366 – 370

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It gives the description of genus Panthera: lion, tiger, leopard, jaguar and snow leopard. The mountains of Central Asia and South Siberia limit the habitat of snow leopard in the USSR. This species is also distributed in the Himalayas, Tibet, and mountains of Mongolia. In summer, it lives at 3,660 – 3,970 m above sea level, while in winter, following the ungulates; snow leopard descends to 1,800 m. In the Himalayas, it ascends up to 5,500 m above sea level in summer. In Djungar and Talas Ala-Tau, snow leopard keeps at 600 – 1,200 m. It takes refuge in caves and cracks of rocks. Snow leopard is mostly active in twilights and night, rarer in daylight, and preys on ungulates, hares, marmots, and others. The coupling period is winter or early spring. A gestation is about 90 days. It has 3 – 5 cubs in a litter.

Keywords (45): USSR/ Panthera/ snow leopard/ distribution/preys/ reproduction.

Reference Type:

Author, Analytic (01): Bannikov A. G., Uspenskiy S. M.

Title, Analytic (04): Snow leopard (irbis). Felis uncia.

Journal Title (10): Game animals and birds of the USSR. Reference book and identifier.

Date of Publication (20): 1973

Volume ID (22):

Location in Work (25): 44

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Irbis is distributed in highlands of Kazakhstan, Kyrgyzstan, Tajikistan, and Altai. It preys mainly on wild sheep and ibex, marmots, pica, snow-cock, rarer – other ungulates, rodents and birds. Sometimes it attacks domestic sheep. At the beginning of spring this species is on heat, gestation period being 90 – 100 days. Female bears two – three (to five) cubs. The litter splits in one year. The animal sheds hair twice a year. It has a low population and therefore hunting for snow leopard is prohibited.

is prohibited.

Keywords (45): USSR/ snow leopard/ distribution/ life history/ threats.

Reference Type:

Author, Analytic (01): Bannikov A. G., Flint V. Ye.

Title, Analytic (04): We must save them.

Journal Title (10):

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 49-50

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes the USSR's fauna species included in the Red Data Book and gives an assessment of endangered species conservation practices throughout the world. It says about ways and perspectives of conservation and rehabilitation of rare animals in the USSR. It provides brief information concerning snow leopard's biology, distribution, number, opportunities for captive breeding, and international conservation activities aimed to protect this species.

Keywords (45): USSR/ endangered species/ Red Data book/ snow leopard/ biology/ distribution/ number/ captive breeding/ conservation.

Reference Type:

Author, Analytic (01): Barpiev I. M., Koichiev M. K.

Title, Analytic (04): Peculiarities of biodiversity in the Besh-Aral nature reserve.

Journal Title (10): Biological diversity of the West Tien Shan.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 25-26

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): 224 animal species, including two relict and 20 endemic, are registered in the Besh Aral nature reserve (Kyrgyzstan). This nature reserve is inhabited by rare and endangered animal and bird species (e.g. Menzbier's marmot, snow leopard, Tien Shan brown bear, manul, Turkistan lynx, saker falcon, bearded vulture, golden eagle, Himalayan griffon, and others) included in the Red Data Books of Kyrgyzstan,

former USSR, and Led List of IUCN.

Keywords (45): Kyrgyzstan/ Besh Aral nature reserve/ animals/ endangered species/ snow leopard.

Reference Type:

Author, Analytic (01): Baryshnikov G. F., Garutt V. Ye., Gromov I. M., et al.

Title, Analytic (04): Sub-genus Panthera Oken, 1816. Genus Panthera.

Journal Title (10): Catalogue of mammals of the USSR.

Date of Publication (20): 1981

Volume ID (22):

Location in Work (25): 282 – 283

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The monograph provides taxonomic description of sub-genus Panthera Oken, 1816, genus Uncia grey, 1854. Snow leopard inhabits the mountains of Tajikistan, the Pamirs, Tien Shan, Tarbagatai, the Altai, the Sayans; also the mountain of Mongolia, Tibet, the Himalayas, and Hindukush, where it keeps to alpine meadows and woodless rocks at up to 3,000 - 4,000 m above sea level in summer, and descends to a lower elevation in winter. It described from the Altai. They are of minor trade importance. This species is rare all over its habitat and included in the Red Data Book of the USSR.

Keywords (45): USSR/ Panthera/ taxonomy/ distribution/ habitats/ using/ snow leopard.

Reference Type:

Author, Analytic (01): Batyrov A. R.

Title, Analytic (04): Game mammals of Uzbekistan and its change at the late Quaternary.

Journal Title (10): Game mammals of Uzbekistan at the Holocene (by materials of archeological dig).

Date of Publication (20): 1987

Volume ID (22):

Location in Work (25): 11-16

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In the process of archeo-zoological investigations in Uzbekistan bones of 81 mammals species were found. Some of them, mainly large mammals are not living here currently. Age of found bones of snow

leopard correspond with early and late Holocene.

Keywords (45): Uzbekistan/ paleozoology/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Batyrov B. Kh., Batyrov A. R.

Title, Analytic (04): Rare and endangered mammals in southern Uzbekistan.

Journal Title (10): Rare mammal species of the USSR and their protection.

Date of Publication (20): 1983

Volume ID (22):

Location in Work (25): 3-4

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): As a result of paleontologic and ecologic research on the south of Uzbekistan 35 rare and endangered mammal species were detected: rare species: bear, steppe polecat, otter, chaus, lynx, manul, sand cat, leopard, snow leopard, Bukhara deer, Goitered gazelle, ibex, markhor, Asian argali, and others; extinct species: dhole, striped hyena, cave hyena, tiger, elephant, horse, kulan, Pleistocene donkey, rhinoceros, Knobloch's camel, roe deer, moral, argali, aurochs, and bison.

Keywords (45): Uzbekistan/ paleozoology/ rare species/ snow leopard/ extinct species.

Reference Type:

Author, Analytic (01): Bekenov A. B., Grachyov Yu. A., Mazin V. N., Shubin V. I..

Title, Analytic (04): *Uncia uncia* Schreber, 1776.

Journal Title (10): Book of gene pool of the Kazakh SSR.

Date of Publication (20): 1989

Volume ID (22): Part1. Vertebrate animals.

Location in Work (25): 149

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There is one subspecies *U.u.uncia* in Kazakhstan. It is distributed in the Tien Shan, Djungar Ala-Tau, Tarbagatai, Saur, South Altai, and preys mainly on ibex, roe deer, argali, and marmots. Its litter consists of one to five cubs (normally two – three). Female bears once in two years.

Keywords (45): Kazakhstan/ snow leopard/ distribution/ life history/ diet.

Reference Type:

Author, Analytic (01): Bekenov A. B., Milner-Gulland E. J., Dukravets G. M., Grachyov Yu.

A., Mityaev I. D.

Title, Analytic (04): About the IUCN categories and criteria for animals inclusion in Red

Data Books and lists (project INTAS 99-1483).

Journal Title (10): Zoological studies in Kazakhstan.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 67-71

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Uncia uncia in Kazakhstan is defined as EN C 2a(i); D1. The

International Red List (2000) attributes this species to EN C 2a, which is an example of concurrence in the assessments at regional and global

levels.

Keywords (45): Kazakhstan/ Red Data book/ categories of threat/ assessment/ snow

leopard.

Reference Type:

Author, Analytic (01): Bekenov A. B., Plakhov K. N., Esjanov B., Shaimardanov R. T.

Title, Analytic (04): Fauna of mammals in the State National Nature Park "Altyn-Emel".

Journal Title (10): Zoological studies in Kazakhstan.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 83-87

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Over 80 mammal species, nine of which are included in the Red Data Book (stone marten, marbled polecat, otter, manul, snow leopard, dziggetai, argali, bear), inhabit the State National Nature Park "Altyn-

Keywords (45): Kazakhstan/ Altyn-Emel national park/ mammals/ endangered mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Berezovikov N. N.

Title, Analytic (04): Rare and endangered birds and animals of South Altai.

Journal Title (10): Fauna of Kazakhstan and its conservation problems.

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 27-30

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): This article describes distribution of snow leopard (*Uncia uncia*), argali (*Ovis ammon*), dhole (*Cyon alpinus*), and manul (*Felis manul*) in South Altai. Nine encounters with snow leopard and its traces were registered in 1966 – 1980, including two facts of catching and one of shooting the animal.

Keywords (45): Kazakhstan/ South Altai/ endangered species/ snow leopard/ poaching.

Reference Type:

Author, Analytic (01): Berezovikov N. N., Zinchenko Ye. S., Zinchenko Yu. K.

Title, Analytic (04): The Markakol nature reserve.

Journal Title (10): Nature reserves of Central Asia and Kazakhstan.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 115-128

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides general information about the Markakol nature reserve (Kazakhstan), physico-geographical characteristic, and description of flora and fauna. Snow leopards were noticed to enter the nature reserve from time to time, which seems to be very small for the predator to inhabit it permanently.

Keywords (45): Kazakhstan/ Markakol nature reserve/ location/ climate/ soil/ flora/ fauna/ snow leopard.

Reference Type:

Author, Analytic (01): Berens K. R

Title, Analytic (04): Bold pathfinders.

Journal Title (10): Under the sky of mountainous Kyrgyzstan.

Date of Publication (20): 1972

Volume ID (22):

Location in Work (25): 20-26

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A hunt for snow leopard in Kyrgyzstan is described in a popular way. The hunters, people of the Issyk-Kul, caught alive five mature snow leopards by means of traps for less than 1.5 month. Such a quantity within such a minimal period of time is a record, since a total number of snow leopards caught per year is no more than 1—12 animals. All the animals were safely delivered to the Moscow "ZooCenter".

Keywords (45): Kyrgyzstan/ hunt/ snow leopard.

Reference Type:

Author, Analytic (01): Berg L. S.

Title, Analytic (04): Fauna.

Journal Title (10): Nature of the USSR.

Date of Publication (20): 1938

Volume ID (22):

Location in Work (25): 161-164

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides description of fauna of the Central Asia mountains. Ibex (*Capra sibirica*) was noticed to keep to the alpine and sub-alpine zone and never descends bellow 2,500 m. Hunting for ibex and wild sheep, snow leopard (*Leopardus uncia*) keeps at the same elevation.

Keywords (45): Central Asia/ mountains/ fauna/ snow leopard.

Reference Type:

Author, Analytic (01):

Title, Analytic (04): Biological diversity conservation. National strategy and action plan of the Republic of Uzbekistan.

Journal Title (10):

Date of Publication (20): 1998

Volume ID (22):

Location in Work (25): 34-35, 54-55, 113-114

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The National strategy and action plan of the Republic of Uzbekistan was signed on April 1, 1998. Snow leopard was included in the list of rare and endangered animal species and referred to category 2 – a rare, not endangered species. It is distributed in highlands of the West Tien Shan and Pamiro-Alay. Its population is 30-50 animals. Snow leopard is protected in the Chatkal, Gissar nature reserve, and Ugam-Chatkal national park.

Keywords (45): Uzbekistan/ national strategy and action plan/ biodiversity/ endangered species/ snow leopard/ distribution/ number/ conservation measures.

Reference Type:

Author, Analytic (01):

Title, Analytic (04): Biological resources.

Journal Title (10): First national report of the Republic of Uzbekistan on Framework

Convention of UN on climate change.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 24-25

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides a summary of plant and animal resources in Uzbekistan.

Among 15,000 animal species, 664 are vertebrate species including 424 bird, 97 mammal, 83 fish, 59 reptile and three amphibian species. Snow leopard, snow cock, ibex, and other species are typical for

highlands.

Keywords (45): Uzbekistan/ biodiversity/ vertebrates/ snow leopard.

Reference Type:

Author, Analytic (01): Bobrinski' N.A.

Title, Analytic (04): Subgenus Leopardus.

Journal Title (10): Guide on hunting-game animals of USSR.

Date of Publication (20): 1935

Volume ID (22):

Location in Work (25): 100-101

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow Leopard *Felis (Leopardus) uncia* S c h r e b., 1778 is distributed in the mountains of Central Asia, Turkmenistan (very rare) and Turkestan, on Tarbagatay, Altay, Sayans and in Uriankhay area. Subspecies haven't been described. Body length is about 130 cm, tail

length - 90 cm.

Keywords (45): USSR/ leopards/ snow leopard/ distribution/ features.

Reference Type:

Author, Analytic (01): Bobrinskiy N. A.

Title, Analytic (04): The mountains of Central Asia.

Journal Title (10): Geography of animals (a course of zoogeography).

Date of Publication (20): 1951

Volume ID (22):

Location in Work (25): 382

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Given is a general characteristic of fauna complexes in the mountains of Central Asia (Jungar Ala-Tau, Tien Shan, Hissar Alai, Kopet-Dag), peculiarities of animal distribution in association with folded mountain relief, vertical zoning, anthropogenic influence and importance of mountain fauna for human beings. It provides a description of main animal groups and is an effort of zoning fauna of the mountains of Central Asia.

Keywords (45): Central Asia/ zoogeography/ mountain fauna/ snow leopard.

Reference Type:

Author, Analytic (01): Bobrinskiy N. A.

Title, Analytic (04): Mountains of Central Asia.

Journal Title (10): Fauna and nature of the USSR.

Date of Publication (20): 1967

Volume ID (22):

Location in Work (25): 296-321

Location/URL (38):

Notes (42):

Abstract (43): It provides a zoogeographical description of Central Asia mountains: Tien Shan (west and east), Pamir, the Turkestan and Hissar ridges, and ruinous mountains in Kyzylkum. Distribution of various animal species over the area under study is described. Data concerning Central Asia sheep, ibex, and snow leopard in the alpine meadow zone, and data concerning the otter (in the Tupalang river basin) and grey partridge is presented. The author noted that generally fauna of Tien Shan, Hissar, and Pamir is similar to that of Inner Asia. The other type of fauna more similar to that of Transcaucasia is typical for Kopet-Dag.

Keywords (45): Middle Asia/ mountain/ Tien Shan/ Pamir/ Hissar ridge/ Turkestan ridge/ Kopet-Dag ridge/ animals/ plants/ Issyk-Kul lake/ Sary-Chelek/ spiders/ birds/ lizards/ marmots/ wild sheep/ ibex/ snow leopard.

Reference Type:

Author, Analytic (01): Bobrinskiy N. A., Matveev B. S.

Title, Analytic (04): Preditors (Carnivora). The mountains of Central Asia.

Journal Title (10): A course of zoology.

Date of Publication (20): 1938

Volume ID (22):

Location in Work (25): 233-234, 278

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes fauna of the Tien Shan, Pamir and Hissar mountains of Central Asia. The mountains of Central Asia. Ibex (*Capra sibirica*) and snow leopard (*Uncia uncia*) are listed among other inhabitants of highlands in Tien Shan and Pamir Hissar.

Keywords (45): Central Asia/ mountain system/ fauna/ snow leopard/ wild ibex.

Reference Type:

Author, Analytic (01): Bobrinskiy N. A., Zenkevich L.A., Birstein Ya.A.

Title, Analytic (04): Mountains of Central Asia.

Journal Title (10): Geography of animals.

Date of Publication (20): 1946

Volume ID (22):

Location in Work (25): 417-427

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A general description of fauna complexes of Central Asia's mountains (Djungar Ala-Tau, Tien-Shan, Gissar, Pamir, Kopet-Dag, Greater Balkhans) is given. A review of main animal groups and an attempt to zone fauna of Central Asia's mountains are made. Fauna of Central Asia's highlands with its specific variety of species (snow leopard, ibex, argali, snow cock and others) is western outpost of Inner Asia's mountain fauna. Snow leopard inhabits highlands of Djungar Ala-Tau, East and West Tien Shan, Bukhara and East Pamir.

Keywords (45): Central Asia/ mountains/ hauna/ snow leopard.

Reference Type:

Author, Analytic (01): Bogdanov O. P.

Title, Analytic (04): Snow leopard (Felis uncia).

Journal Title (10): Animals of Uzbekistan.

Date of Publication (20): 1961

Volume ID (22):

Location in Work (25): 246-247

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Uzbekistan, this species is distributed in spurs of Tien Shan and Gissar. It preys on ibex, rarer – on argalis, roe-deers, young wild boars. In winter, it attacks livestock and sometimes feeds upon marmots and smaller rodents. Snow leopard attacks man very rarely, only when wounded. The economic significance of this species is low, since only few skins are traded. Its dressed skins are used as rugs.

Keywords (45): Uzbekistan/ snow leopard/ distriburion/ life history/ diet/ use.

Reference Type:

Author, Analytic (01): Bogdanov O. P.

Title, Analytic (04): The Chatkal state mountain forest biosphere reserve. The Hissar

nature reserve.

Journal Title (10): Nature reserves of Uzbekistan. Stories of naturalist.

Date of Publication (20): 1989

Volume ID (22):

Location in Work (25): 11-28, 58-68

Location/URL (38):

Notes (42):

Abstract (43): In a popular form it describes the origination, nature and fauna of the Chatkal nature reserve. Habitats and ecology of Menzbier's marmot, water-snake, forest dormouse, and fox are described. It also indicates mammal and bird species listed in the Red Book of the USSR – black vulture, griffon vulture, bearded vulture, golden eagle, snow leopard, Turkestan lynx, and Tien-Shan brown bear. There are 23 mammal species in the Hissar nature reserve. Ecology of snow leopard and Siberian mountain ibex is described.

bears, five to seven snow leopards, and 120 – 150 Siberian mountain ibex were counted in the nature reserve.

Keywords (45): Uzbekistan/ Chatkal nature reserve/ Hissar nature reserve/ birds/

mammals/ amphibians/ reptiles/ plants/ rare species/ numerous species/

In the year 1977, 15 Turkestan lynx, about 25 Tien-Shan brown

snow leopard.

Reference Type:

Author, Analytic (01): Bogdanov O. P.

Title, Analytic (04): Snow leopard or irbis Uncia Uncia.

Journal Title (10): Rare and endangered animals of Uzbekistan. Encyclopedic

reference book.

Date of Publication (20): 1992

Volume ID (22):

Location in Work (25): 76-80

Location/URL (38):

Notes (42):

Abstract (43): Snow leopard and its habitat within the USSR and Uzbek SSR are described. Its habitat in the Chatkal and Hissar ridges are described too. Given are data concerning alimentary biology, reproduction, and attitude to man. Female snow leopards become mature at the age of two – three years, male – at the age of four years. Reproduction occurs once every two years. Presumably, there are 10 animals in the country. Snow leopard is protected in four nature reserves in Uzbekistan and a number of nature

Keywords (45): USSR/ Uzbekistan/ Pamir/ Tien Shan/ Hissar ridge/ Turkestan ridge / Chatkal ridge/ juniper forest/ snow leopard/ species range/ hunting/ behavior/ diet/ reproductive activity/ number/ ibex/ mountain sheep.

reserves in neighbour countries.

Reference Type:

Author, Analytic (01): Brem A. E.

Title, Analytic (04): Irbis, or snow leopard (Felis uncia).

Journal Title (10): Life of animals.

Date of Publication (20): 1992

Volume ID (22): Vol.1. Mammals.

Location in Work (25): 204-205

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard is met in the mountains of Turkistan, Altai, Bukhara, Pamir, Kashmir, and Tibet, and probably in South-East Siberia and along Sungari. In 1871, two animals were living in the Moscow Zoo

Garden.

Keywords (45): Snow leopard/ distribution/ identification features.

Reference Type:

Author, Analytic (01) Burgelo T. B., Kovshar A. F., Annenkov B. P., Auezov E. M.,

Zinchenko Yu. K., Berezovikov N. N., Scherbakov B. V., Kochnev A.

G., Sibiryakova A. L.

Title, Analytic (04): Brief information of snow leopard.

Journal Title (10): Rare animals of Kazakhstan.

Date of Publication (20): 1986

Volume ID (22):

Location in Work (25): 54-55

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): This article describes the encounters with snow leopard and their traces in various areas of Kazakhstan. In the Aksu Djabagly nature reserve, population of snow leopard does not exceed 10-12 animals. There were found remains of moral, argali, ibex, small birds, red-tailed marmot, hare (*Lepus talai*), mouse rodents and plants. One encounter with snow leopard is known to have occurred in the Greater Almaty Canyon in 1971-1981. There are no less than 25 snow leopards in the Jungar Ala-Tau. Snow leopard was found in the Aksu river valley, ridge Saur, and South Altai. The following number of snow leopards was kept in Kazakhstan's zoos, as of January 1, 1984: two males – in Alma-Ata, one female – in Chimkent. In 1976, one cub was born in the Alma-Ata

Keywords (45): Kazakhstan/ snow leopard/ records/ analysis of food remains/ captive breeding.

Reference Type:

Author, Analytic (01) Bykova E.A., Esipov A.V., Aromov B., Kreuzberg-Mukhina E.A.,

Vashetko E.V.

Title, Analytic (04): Method of questionnaire design used for the collecting of primary data

on threatened species with the example of snow leopard.

Journal Title (10): Status and perspectives of the protected area network in Central Asia.

Date of Publication (20): 2004

Volume ID (22):

Location in Work (25): 208-214

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Method of questionnaire design is used for long time successfully in the various fields of zoological research. This method is most significant for the collecting of data on threatened species. It can be applied together with standard inquest and survey methods without taking remarkable financial and temporal expenses. Such data can be assigned as the base for further planning of scientific investigations of the threatened species. In the result of survey, there were gathered 96 records of Snow Leopard and its tracks of the vital functions on Ugam, Pskem, Chatkal, Turkestan and Hissar ridges. Majority of records was made on Hissar ridge either on the area of Hissar reserve, either outside of protected area. There was collected data on distribution of Snow Leopard in Uzbekistan, on its territorial and food behavior, cases and causes of poaching. As a conclusion, it seems to be rational to use the method of questionnaire design among rangers of protected areas and local inhabitants for the collecting of primary information on threatened animal species. It would be optimal to gather such data every 3-4 years that would allow receiving the fresh comparable yearby-year information. Interpretation of questionnaire data should be made with certain prudence, taking into account subjectivity of collected information. Therefore during gathering of questionnaire data it is desirable personal attendance of researcher for more accurate definition of answers on the presented questions.

Keywords (45): Uzbekistan/ questionnaire based method/ distribution/ number/ food/ behavior/ poaching/ snow leopard.

Reference Type:

Author, Analytic (01): Cherkasova M. V.

Title, Analytic (04): Predators.

Journal Title (10): They must live. Mammals.

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 15

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Among species included in the Red Data Book of the USSR, predators occupy the first place; of them, unconditional leadership belongs the cat family species. Nine of eleven species of the family are referred to as rare and endangered ones. In the past snow leopard (*Uncia uncia*) inhabited all mountains on the south of the USSR from Tien Shan and Pamir to Transbaikalia. Now it no longer inhabits many of its previous habitats and has become rare, everywhere. Its total population in the USSR is no more than 1000 animals. At the beginning of XX century there were cases that such an amount of snow leopard (i.e. 1,000) was hunted during one year. Until recently, hunting the species was allowed all year round and even encouraged.

Keywords (45): USSR/ Red Data book/ mammals/ carnivores/ cats/ snow leopard.

Reference Type:

Author, Analytic (01): Chernogaev E. A.

Title, Analytic (04): Materials on rare and protected species of the Kyzylsu nature reserve.

Journal Title (10): Protection of flora and fauna in Uzbekistan.

Date of Publication (20): 1978

Volume ID (22):

Location in Work (25): 39-40

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): This survey was being done (May, 1975 – February, 1976) in the new Kyzylsu nature reserve, established in 1975. Before 1975, the anthropogenic pressure was mainly represented by overgrazing and unregulated hunting. Provided are data on bird species (bearded vulture, Himalayan vulture, griffon vulture, golden eagle, and Himalayan snow cock), mammal species (long-tailed marmot, Indian porcupine, brown bear, lynx, snow leopard, and Siberian ibex).

Keywords (45): Uzbekistan/ Kyzylsu nature reserve/ rare species/ birds/ mammals/ snow leopard/ poaching/ human influence.

Reference Type:

Author, Analytic (01): Chernogaev E.A., Kajumov B.K., Savitch O.V., Pogrebnjuk A.D.,

Aromov B.

Title, Analytic (04): Modern condition and number of animals in nature reserves of

Uzbekistan.

Journal Title (10): Proceedings of nature protected areas of Uzbekistan.

Date of Publication (20): 1996

Volume ID (22): Issue 1.

Location in Work (25): 23-34

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There is adducing information about number and modern condition of *C.ferox, G.barbatus, A.chrisaëtus, M.menzbieri, U.arctosisabellinus,*

L.lutra seistanica, H.hiena, F.lynx isabellina, U.uncia, C.elaphus bactrianus, G.subgutturoza, C.falconeri, O. ammon severtzovi, O. orientalis bochariensis and other species during last years in Chatkal, Nuratau, Hissar, Surkhan and Kyzylkum nature reserves. There is

prognosis in changing of number.

Keywords (45): Uzbekistan/ nature reserves/ modern condition/ number/ rare species/

snow leopard.

Reference Type:

Author, Analytic (01): Chichikin Yu.N.

Title, Analytic (04): Ways to enrich game fauna of Kyrgyzstan.

Journal Title (10): Love and protect nature of Kyrgyzstan.

Date of Publication (20): 1968

Volume ID (22):

Location in Work (25): 33-39

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Kyrgyzstan, there are 106 mammal and 111 bird species. 40 mammal and 70 bird species are game ones. Resources of some of them were undermined due to over-hunting. Moral, goitered gazelle, pheasant have disappeared; argali, roe deer, and wild boar have become not numerous. In order to protect game fauna and regulate hunting of wild animals, hunting was prohibited at lake Issyk-Kul (1948); hunting for moral, goitered gazelle, swan, bar-headed goose, pheasant, snow leopard, bear, and argali was prohibited too (1952, 1956 and 1958).

Keywords (45): Kyrgyzstan/ game species/ birds/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Chichikin Yu.N., Yanushevich A.I.

Title, Analytic (04): Issyk Kul nature reserve.

Journal Title (10): Protected areas of Soviet Union.

Date of Publication (20): 1969

Volume ID (22):

Location in Work (25): 475-480

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A description of the Issyk Kul nature reserve (Kyrgyzstan) is given and includes as follows: data of establishment, location, physic and geographic description, climate, flora and fauna. Snow leopard inhabited in Jety Oguz site of the nature reserve.

Keywords (45): Kyrgyzstan/ Issyk Kul nature reserve/ Jety Oguz site/ establishment/ climate/ physiographic factors/ plants/ animals/ snow leopard.

Reference Type:

Author, Analytic (01): Chumakova A. V.

Title, Analytic (04): The Kyzylsu, Miraki, and Markakol nature reserves.

Journal Title (10): Nature reserves of the USSR.

Date of Publication (20): 1980

Volume ID (22):

Location in Work (25): 153-155, 167-168

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A description of the Kyzylsu, Miraki, and Markakol nature reserves is given and includes as follows: data of establishment, location, physic and geographic description, types of soils, climate, vegetation, altitude zones, and fauna. In the Kyzylsu nature reserve there are 28 mammal species; in Miraki – 23, and in Mirkakol – 39. Snow leopard can be found in all the three nature reserves.

Keywords (45): Central Asia/ nature reserves/ Kysylsu nature reserve/ Miraki nature reserve/ Markakol nature reserve/ establishment/ soil/ climate/ physiographic factors/ researching/ plants/ animals/ snow leopard.

Reference Type:

Author, Analytic (01): Dementiev G. P., Rustamov A. K., Uspenskiy S. M.

Title, Analytic (04): Quadrupeds inhabitants of the mountains.

Journal Title (10): In severe cold and heat. (Animal and landscape).

Date of Publication (20): 1967

Volume ID (22):

Location in Work (25): 110-116

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): All species inhabiting the highlands of Asia are normally referred to as herbivorous or predators. A majority of alpine land species (rodents and ungulates) feeds upon leaves, stalks, and roots of plants. Among widely distributed highland species the most interesting are marmots, red pica, grey vole, argali, and ibex. Argali and ibex are preyed on by snow leopards. There are reasons to believe that these mountain animal species are more ancient than their cognates in a plain. All the way from Central Asia to Europe, species belonging to the eastern and western fauna complexes are observed to interpenetrate.

Keywords (45): Asia/ mountain fauna/ endemics/ species range/ rodents/ ungulates/ carnivores/ marmots/ pikas/ voles/ ibex/ mountain sheep/ snow leopard.

Reference Type:

Author, Analytic (01): Dementiev G. P., Pokrovskiy V. S.

Title, Analytic (04): Mammals.

Journal Title (10): Rare and endangered mammal and bird species in the USSR.

Date of Publication (20): 1969

Volume ID (22):

Location in Work (25): 19-27

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides a list and discusses a status of rare and endangered predators and ungulates in the USSR (24 species in total). Snow leopard inhabits the mountain ridges of Tajikistan and Kyrgyzstan, in the Altai and Tuva. The habitat of snow leopard had not changed significantly since recently, though its population had been reducing (according to materials of the year 1967). Such reduction of its population is because of the common assumption of its harmfulness and high demand for its fur-skin and high prices that zoos would readily pay for the animals.

Keywords (45): USSR/ endangered species/ snow leopard/ distribution/ fluctuation/ threats.

Reference Type:

Author, Analytic (01): Devyatkin G. V., Prokofiev S. M.

Title, Analytic (04): Snow leopard (*Uncia uncia Schr.*) in the Altai-Sayans ecologic region.

Journal Title (10): 4th congress of mammalogists' society.

Date of Publication (20): 1999

Volume ID (22):

Location in Work (25): 71

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Though snow leopard is widely distributed in the Altai-Sayans ecologic region (the Krasnoyarsk region, Khakasia, Tuva, the Altai), it is still a rare and understudied species. Its total population in Khakasia is 10-12 animals, in the Altai – 60-70 animals.

Keywords (45): Russia/ Altai/ snow leopard/ distribution/ number.

Reference Type:

Author, Analytic (01): Dustov J., Lanovenko E. N., Chinov V.

Title, Analytic (04): Evaluation of current status of large mammals in the Chatkal nature

Journal Title (10): Biodiversity of the Western Tien Shan: protection and sustainable use.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 89-92

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The counts of species populations such as Menzbier's marmot, roedeer, ibex, wild boar, wolf, Tien Shan brown bear, and snow leopard has been made on permanent transects in the Chatkal reserve for 18 years. Data on of the population numbers is provided. 11 encounters with snow leopard were registered during a period of 1975 through 1979. Two encounters were recorded in 2000.

Keywords (45): Uzbekistan/ Western Tien Shan/ Chatkal nature reserve/ distribution/ number/ snow leopard.

Reference Type:

Author, Analytic (01): Egorov O. V.

Title, Analytic (04): Enemies, infections, parasites and mortality rate of ibex.

Journal Title (10): Proceedings of ZIN of the Academy of Science of the USSR.

Date of Publication (20): 1955

Volume ID (22): Vol. 42.

Location in Work (25): 37-50

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Reasons for ibex and argali mortality from natural enemies, parasites, infections, accidents, and hunters are analyzed. Snow leopard is one of the most dangerous enemies of ibex and argali, preying equally on both young and mature animals (mostly males). Snow leopard feeds upon ibex all year round. Unlike wolf, snow leopard would never kill several animals at a time, but only one selected victim. The food remains left by these predators are different in terms of the skull gnawing. Nasal bones and eye-sockets on the skull of ibex killed by snow leopard remain undamaged, while wolf gnaws off nasal part of the skull, breaks eye-sockets, eats lower jaw, widens occipital hole and pulls out brains. Snow leopard leaves large pieces of skin around the skeleton of the victim, whereas wolf tears it to shreds or eats up fully. Sometimes parts of the victim left by snow leopard are eaten by wolf. It is easy to mix the remains of snow leopard's or griffon vulture's food. The remains differ in skin being turned inside out rather than torn to large pieces.

Keywords (45): USSR/ ungulates/ predators/ snow leopard.

Reference Type:

Author, Analytic (01): Elkin K. F.

Title, Analytic (04): Predatory mammals in the Eastern Kazakhstan.

Journal Title (10): Ecologic fundamentals of protection and sustainable use of predatory

mammals.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 34-36

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There are 20 predatory mammal species in eastern Kazakhstan, three of

which disappeared (tiger, dhole, raccoon), five are endangered (snow leopard, wild cat, manul, marbled polecat, and stone marten). Snow

leopard is not met in the South Altai and Tarbagatai each year.

Keywords (45): Kazakhstan/ carnivores/ snow leopard.

Reference Type:

Author, Analytic (01): Epifanov V. M.

Title, Analytic (04): Fauna.

Journal Title (10): The land of pristine environment (Guidebook for the Chatkal nature reserve).

Date of Publication (20): 1968

Volume ID (22):

Location in Work (25): 29-33

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There are three fish species, two amphibian species, nine – reptile, 97 – bird species, and 23 mammal species, including snow leopard, in the

Chatkal reserve. A list of animals and their brief description is

provided.

Keywords (45): Uzbekistan/ Western Tien Shan/ Chatkal nature reserve/ fishes/

amphibians/ reptiles/ birds/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Esipov V. M.

Title, Analytic (04): Chatkal nature reserve.

Journal Title (10): Nature reserves of the USSR.

Date of Publication (20): 1969

Volume ID (22):

Location in Work (25): 486-494

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Presented is history of the Chatkal nature reserve's establishment, physic and geographic description, types of soils, climate, altitude zones, flora and fauna, historical monuments. Snow leopard is quiet rare species in nature reserve. Last years irbis's tracks and voice have been recorded in highly mountain sites of Maidantal part of Chatkal nature reserve.

Keywords (45): Uzbekistan/ Western Tien Shan/ Chatkal nature reserve/ establishment/ soil/ climate/ physiographic factors/ altitude zones/ flora/ fauna/ snow leopard.

Reference Type:

Author, Analytic (01): Esipov V. M.

Title, Analytic (04): The nature reserve in the spurs of Tien Shan.

Journal Title (10): Journal 'Soviet Uzbekistan Today'

Date of Publication (20): 1978

Volume ID (22): Vol.8.

Location in Work (25): 8

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The Chatkal state mountain forest nature reserve is located in western spurs of the Chatkal ridge. The permanent inhabitants of the nature reserve are ibex, wild boar, roe-deer, bear, badger, porcupine, stone marten, fox, ermine, Menzbier's marmot, and relict suslik (gopher), and bird species such as gray partridge, snow-cock, black vulture, griffon vulture, etc. Under special protection are rare animal and bird species such as snow leopard, Menzbier's marmot, bearded vulture, golden eagle, etc.

Keywords (45): Uzbekistan/ Chatkal nature reserve/ location/ animals/ snow leopard.

Reference Type:

Author, Analytic (01): Esipov V. M.

Title, Analytic (04): Chatkal mountain-forest nature reserve.

Journal Title (10): Hunter and fisherman of Uzbekistan.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 64-68

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It described history of the Chatkal nature, flora and fauna, scientific and conservation activities. Snow leopard, brown bear, Menzbier's marmot, golden eagle, snake-eagle and lammergeyer inhabited in nature reserve. These species included in Red data book.

Keywords (45): Uzbekistan/ Chatkal nature reserve/ establishment/ flora/ fauna/ researching/ rare species/ snow leopard.

Reference Type:

Author, Analytic (01): Esipov V. M.

Title, Analytic (04): The status and perspective protection and rehabilitation of natural

ecosystems in the Chatkal state biosphere nature reserve under the

State Committee for Agriculture and Industry of the USSR.

Journal Title (10): Geographical problems of wildlife protection development.

Date of Publication (20): 1986

Volume ID (22):

Location in Work (25): 15-17

Location/URL (38).

Notes (42): Full text available ...

Abstract (43): The area of the Chatkal nature reserve reduced as part of its territory (a

land plot in the Shavasay river basin) was assigned to a military game preserve. As regime of protection worsened, number of animals such as Menzbier's marmot, snow leopard, ibex, snow cock, and black stork

began to reduce.

Keywords (45): Uzbekistan/ Chatkal nature reserve/ establishment/ conservation

regime/ animals/ snow leopard.

Reference Type:

Author, Analytic (01): Esipov V. M.

Title, Analytic (04): Chatkal biosphere nature reserve. Buffer zones needed badly.

Journal Title (10): Nature reserves of the USSR.

Date of Publication (20): 1990

Volume ID (22): Vol.1.

Location in Work (25): 294-296

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Briefly presented is history of the Chatkal nature reserve's establishment, protected flora and fauna, and intense economic activity impact on wildlife of the protected area.

Keywords (45): Uzbekistan/ Western Tien Shan/ Chatkal nature reserve/ fauna/ snow leopard/ poaching/ human influence/ protection.

Reference Type:

Author, Analytic (01): Esipov A. V.

Title, Analytic (04): Status and Conservation of Snow Leopard in Uzbekistan.

Journal Title (10): Proceedings of 8th International Snow Leopard Symposium – Islamabad.

Date of Publication (20): 1995

Volume ID (22):

Location in Work (25): 48-49

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There are two isolated snow leopard populations in Uzbekistan, both of which are located along the fringe of the species' distribution. These groups are the Pamir-Alai and the Tien-Shan, of which are united to snow leopard range in neighboring Tadjikistan and Kyrgyzstan. Apart from animals inhabiting the Hissar Nature Reserve, the Pamir-Alai population consists of animals inhabiting the upper portion of the Tupalang River basin and the mountains around Baisuntau. This population is currently estimated at about 30 individuals, from which as many as 10 individuals are reported to be killed or captured annually. However, we suspect the loss rate is more like five to eight individuals, with the entire Pamir-Alai group in Uzbekistan numbering 22 - 25 animals. The Tien-Shan snow leopard sub-population group of Uzbekistan occupies the high-mountain portions of practically all of the large ridges in the area, including Chatkal, Pskem, Ugam and Talass The number of snow leopards harvested from this subpopulation appears to be five or seven individuals, with the total number placed at 27-32 individuals. The major factors restricting snow leopard numbers in Uzbekistan appears to be poaching of both snow leopard and its large prey species like ibex, as well as disturbance associated with the intensive development of the alpine lands for pasturing livestock. In order to preserve the snow leopard in Uzbekistan it will be necessary to control and eliminate poaching. Additional habitat could be provided by expanding the Chatkal Nature Reserve by adding lands in the Shavassai River basin as well as Akbulak River basin.

Keywords (45): Uzbekistan/ Hissar nature reserve/ number/ distribution/ threats/ conservation measures/ snow leopard

Reference Type:

Author, Analytic (01): Esipov A. V.

Title, Analytic (04): The 56th anniversary of the Chatkal reserve.

Journal Title (10): Guliston Journal

Date of Publication (20): 2003

Volume ID (22): $N_{\underline{0}}5$.

Location in Work (25): 15

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Being one of nine nature reserves in Uzbekistan, Chatkal was established in 1947. Its area changed its size and administrative jurisdiction. Foothills adjacent to the nature reserve were long ago inhabited and developed by people. In Middle Ages, the area of juniperous forest reduced considerably because of mining operations. There are rare mammal species in the nature reserve, such as snow leopard, bear, Menzbier's marmot, and six rare bird species.

Keywords (45): Uzbekistan/ Chatkal nature reserve/ fauna/ rare species/ snow leopard.

Reference Type:

Author, Analytic (01): Esipov A. V., Lesnyak A. P.

Title, Analytic (04): Measure for snow leopard protection in Uzbekistan.

Journal Title (10): Ecology of rare and endangered mammals in south Uzbekistan.

Date of Publication (20): 1985

Volume ID (22):

Location in Work (25): 30-32

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Uzbekistan, snow leopard (*Uncia uncia Schreber*, 1776) is met in the mountain ridges of Tien Shan (Karjantau, Ugam, Pskem, Chatkal, and possibly Kurama ridges) and Alay (Turkistan, Zaravshan, Gissar, and Baisuntau ridges). There are about 50 snow leopards there. They are observed to decrease in number for the reasons as follows: extensive use of alpine pastures, tourist activity and poaching. Irbis is under protection in the Chatkal, Zaamin, and Gissar nature reserves and Zaamin people's park. An additional measure to be taken to protect this species is to expand the area of the Chatkal nature reserve, to better fight against poaching activity and advocate snow leopard protection in mass media.

Keywords (45): Uzbekistan/ distribution/ number/ threats/ protection.

Reference Type:

Author, Analytic (01): Esipov A. V., Bykova E.A., Kreuzberg-Mukhina E.A., Vashetko E.

V., Aromov B.

Title, Analytic (04): Current state of snow leopard and its main preys in Hissar nature

reserve.

Journal Title (10): Conservation of biodiversity in strictly protected territories of

Uzbekistan.

Date of Publication (20): 2000

Volume ID (22):

Location in Work (25): 61-67.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): An expert evaluation of the numbers of snow leopard and its preys, Siberian ibex and long-tailed marmot, was made on the basis of surveys conducted in Hissar nature reserve in 1999. The total number of the snow leopard is estimated at 12-16 individuals, whereas that of the Siberian ibex at 1000 individuals. An average density of the population of the long tailed marmot ranges at 4,8 individuals per ha. The ratio of the numbers between the snow leopard, Siberian ibex and long tailed marmot is 1:68:450. The major threats for the snow leopard are poaching on the borders of the nature reserve, a decrease in of preys, shrinking of the range in areas adjoining the nature reserve as a result of intensification of industrial activities and disturbing factors. For the Siberian ibex and long tailed marmot the major limiting factors are the shrinking of the areas and deterioration of the forage value of the high-mountain pastures, as well as the direct competition for forage with domestic animals at the sites adjoining the territory of the nature, as well as disturbing factors.

Keywords (45): Uzbekistan/ Hissar nature reserve/ number/ distribution/ threats/ snow leopard/ Siberian ibex/ long-tailed marmot.

Reference Type:

Author, Analytic (01): Esipov A.V., Bykova E.A., Kreuzberg-Mukhina E.A., Vashetko E.V.

Title, Analytic (04): Distribution and Numbers of the Siberian Ibex in the Hissar Nature

Reserve, Uzbekistan.

Journal Title (10): Necessity of nature protection in South Uzbekistan.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 76-78

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes distribution and number of ibex in four parts of the Hissar nature reserve in Uzbekistan. The total number of ibex is estimated to be 1,500 animals. The natural enemies of ibex are snow leopard, wolf, and lynx. Data about ibex's food, seasonal migrations, and threats are given. Decreasing forage reserve and poaching are considered as the most serious threats. A buffer zone is suggested to be established in the areas adjacent to Tajikistan and the Surkhandarya region of

Uzbekistan.

Keywords (45): Uzbekistan/ Hisssar nature reserve/ wild ibex/ distribution/ number/ predators/ snow leopard.

Reference Type:

Author, Analytic (01): Esipov A. V., Bykova E.A.

Title, Analytic (04): Snow Leopard (Irbis).

Journal Title (10): Red Data Book of Republic of Uzbekistan.

Date of Publication (20): 2003

Volume ID (22): Vol. II. Animals.

Location in Work (25): 218-219

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Critically Endangered 1 (CR C2a(i); D), locally distributed western subspecies of Central Asian species. It occurs in Western Tien Shan and Western Pamir Alay. It inhabits middle and high belts of the mountains. It prefers watersheds and rocky talus slopes. It never was numerous; last decades the numbers have been decreasing. In 1980's-1990's in Hissar nature reserve 5-11 individuals were counted, in 1970's-1980's in Chatkal nature reserve the 1-3 specimens were observed. Perhaps, total number is 20-30 individuals. The threats are development of high mountain pastures, decreasing of prey numbers, human persecution and poaching. Included in the IUCN Red List [EN]

and in Appendix I of CITES.

Keywords (45): Uzbekistan/ Red Data book/ category of threat/ number/ distribution/ threats/ snow leopard.

Reference Type:

Author, Analytic (01): Esipov A.V., Sarimsakov E.

Title, Analytic (04): Ugam Chatkal State Nature Park.

Journal Title (10): Ecological News Journal.

Date of Publication (20): 2004

Volume ID (22): N1

Location in Work (25): 46-47

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There are endangered species as bear, snow leopard and Menzbier's marmot recorded in Western Tien Shan mountains. Wild boar, Siberian ibex, roe deer, wolf, badger, porcupine and red fox are rather numerous

species on this area.

Keywords (45): Uzbekistan/ Ugam Chatkal Nature Park/ mammals/ endangered species/ snow leopard/ numerous species/ ibex.

Reference Type:

Author, Analytic (01): Fedosenko A. K., Zhiryakov V. A.

Title, Analytic (04): Relationship between the predators and wild ungulates in North Tien Shan and Jungar Alatau.

Journal Title (10): Ecologic fundamentals of protection and sustainable use of predatory mammals.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 72-74

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Ibex is a main prey for snow leopards. The role of marmots and snow cocks in snow leopard's consumption is negligent. It can prey on morals in the fir-wood. A case of snow leopard's attacking a dog is also known.

Keywords (45): Kazakhstan/ predators-preys relationship/ snow leopard/ preys.

Reference Type:

Author, Analytic (01): Filonov K.F., Schadrina G.D.

Title, Analytic (04): Large terrestrial mammals in the reserves of Russia: their status and

prospects of conservation

Journal Title (10): Status of mammal fauna in Russian and adjoining states.

Date of Publication (20): 1996

Volume ID (22):

Location in Work (25): 343-348

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The authors make an analysis of fauna of large mammals in 68 nature

reserves. There are 10 carnivores and 17 ungulates. Wolf, brown bear, wolverine and lynx appeared to be more widely spread. Dhole, snow leopard, tiger, Himalayan bear have limited distribution and low density. Hey have recorded in a few nature reserves. Among the

ungulates wild boar, musk deer, red deer, roe deer, moose, reindeer and aurochs are more widely spread.

Keywords (45): Russia/ nature reserves/ large mammals/ carnivores/ ungulates/

distribution/ number/ snow leopard.

Reference Type:

Author, Analytic (01): Flerov K. K.

Title, Analytic (04): Capra sibirica, Uncia uncia uncia Erxleben.

Journal Title (10): Animals of Tajikistan, their life and importance for man.

Date of Publication (20): 1935

Volume ID (22):

Location in Work (25): 115-120, 195-196

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes identification signs of ibex and snow leopard; provides data concerning taxonomy, distribution and behavioral patterns of the both species. Snow leopard inhibits the mountains of Central Asia, Tarbagatai, Altai, Sayans and southward to the Humalayas. In Tajikistan snow leopard is distributed in Pamir, and probably, along alpine strip of the ridges in northern Tajikistan. The sub-species status is not defined. It is known that the same type inhabits the area from the Sayans to Himalayas. Only in Tibet and highlands of Sychuan and Gansu lives a well-marked sub-species Uncia uncia uncioides Hodgson.

Keywords (45): Tajikistan/ wild ibex/ snow leopard/ taxonomy/ distribution/ behavior.

Reference Type:

Author, Analytic (01): Flint V.E., Chugunov Yu.D., Smirin V.M.

Title, Analytic (04): The cats - Felidae.

Journal Title (10): Mammals of USSR.

Date of Publication (20): 1970

Volume ID (22):

Location in Work (25): 149-164

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Description of 12 cats species from USSR (Felis silvestris, Felis libyca, Felis euptilura, Felis chaus, Felis lynx, Felis caracal, Felis manul, Felis margarita, Felis tigris, Felis pardus, Felis uncia, Acinonyx jubatus) is given. Snow leopard inhabited in mountain ridges of

Kazakhstan, Middle Asia, Altai and Sayan.

Keywords (45): USSR/ Felidae/ taxonomy/ distribution/ snow leopard.

Reference Type:

Author, Analytic (01): Formozov A. N.

Title, Analytic (04): Tiger and snow leopard.

Journal Title (10): Pathfinder's companion.

Date of Publication (20): 1952

Volume ID (22):

Location in Work (25): 169 – 171

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Over the last decades tiger, leopard and snow leopard were fully exterminated in many areas, where they formerly were common species and now became very rare ones. Few leopards can still be found in Caucasus, Copet-Dag (Turkmenistan) and south of Primorskiy krai. Irbis is remaining a common species only in the difficult-ofaccess highland areas of Tien Shan and very rare in the Altai. Tiger traces are sometimes found in the Amudarya river valley and in the

taiga Sihote-Alinya in the Far East.

Keywords (45): USSR/ big cats/ tiger/ leopard/ snow leopard.

Reference Type:

Author, Analytic (01): Formozov A. N.

Title, Analytic (04): Fauna of mountainous areas in Kazakhstan.

Journal Title (10): Fauna of Kazakhstan.

Date of Publication (20): 1987

Volume ID (22):

Location in Work (25): 115-126

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The author provides description of fauna of Kazakhstan's mountainous areas. Fauna of the mountain taiga is also typical for the forests of South Siberia. Ungulate species such as musk deer and ibex are common for rocky taiga areas. In the Altai, ibex, musk deer, and wild sheep are preyed on by dhole and snow leopard and more typical species such as glutton and wolf. Ibex, argali, and irbis are typical for Transili Ala-Tau and West Tien Shan. Tien Shan is the only area of the USSR with quite many irbis preserved. The ridges of this mountainous area located in Kazakhstan are very likely to be an area the most densely populated by snow leopards within the predator's habitat.

Keywords (45): Kazakhstan/ mountains/ fauna/ snow leopard.

Reference Type:

Author, Analytic (01): Formozov A.N.

Title, Analytic (04): Tiger. Leopard. Snow Leopard.

Journal Title (10): Pathfinder's companion.

Date of Publication (20): 1989

Volume ID (22):

Location in Work (25): 38-40

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The number of large cats is reducing. These animals are hold out in the most difficult of access places. During long time snow leopard was a poorly known animal. The situation was changed with developing of mountain tourism and mountaineering. It's necessary to reduce the capturing snow leopards for zoological gardens.

Keywords (45): USSR/ big cats/ tiger/ leopard/ snow leopard.

Reference Type:

Author, Analytic (01): Formozov A. N.

Title, Analytic (04): Seasonal migrations of mammals due to snow cover. Distribution of

the Felidae family species.

Journal Title (10): Snow cover in life of mammals and birds.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 83-84, 134-136

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes vertical migrations of ungulates (ibex, wild sheep) in the Semerechie, Altai, Sayans, Tuva, seasonal migrations of steppe ungulates (kulan and saiga), and migrations of predators (lynx, leopard, irbis, tiger, dhole, wolf, glutton) following ungulates during winters with thick snow cover. Shorter local migrations related to uneven snow cover are typical for corsac, fox, and wolf. An analysis of the Felidae family species distribution showed that northern border of the cat family species habitat is connected with borders of 20 – 30 cm thick snow cover rather than with landscape contours or typical habitats. With the exception of lynx, this can be referred to the large cat family

species such as irbis, leopard, and tiger.

Keywords (45): Migration/ ungulates/ carnivores/ snow leopard.

Reference Type:

Author, Analytic (01): Frolov M. V., Yazan Yu. P.

Title, Analytic (04): About establishment of the Dashti-Djum nature reserve in Tajikistan.

Journal Title (10): Status and perspectives of wildlife protection in the USSR.

Date of Publication (20): 1981

Volume ID (22):

Location in Work (25): 124-126

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The Dashti-Djum nature reserve is suggested to be established in an area of the Darvaza and Khazratishah ridges – a habitat of markhor, ibex, long-tailed marmot, etc. Snow leopard and brawn bear are also found at some parts of the planned nature reserve.

Keywords (45): Tajikistan/ Dashti-Djum nature reserve/ establishment/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Geptner V. G., Sludskiy A. A.

Title, Analytic (04): Genus snow leopard or irbis.

Journal Title (10): Mammals of the Soviet Union.

Date of Publication (20): 1972

Volume ID (22): Vol. 2, Part 2.

Location in Work (25):

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes genus and species features of snow leopard such as appearance, skull, sizes, phylogenetic links, distribution, geographic variability, biology including number, habitat, refuges, activity in daylight and night, behavioral patterns, reproduction, enemies and rivals, and practical use of the species.

Keywords (45): USSR/ snow leopard/ identification/ phylogeny/ distribution/ number/ life history/ use.

Reference Type:

Author, Analytic (01): Golub O. N.

Title, Analytic (04): The Ramit nature reserve and its problems.

Journal Title (10): The status and perspectives of wildlife protection in the USSR.

Date of Publication (20): 1981

Volume ID (22):

Location in Work (25): 60-61

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The following Red Data Book species inhabit the Ramit nature reserve: snow leopard, bear, lynx, otter, Bukhara deer, etc. Its population is indicated to be closely related to number of ibex (150 animals). The latter is subject to heavy anthropogenic pressure when migrating outside the nature reserve in winter.

Keywords (45): Tajikistan/ Ramit nature reserve/ animals/ snow leopard/ ibex/ number/ threats.

Reference Type:

Author, Analytic (01): Golub O. N., Frolov M.V., Borisov S. N.

Title, Analytic (04): Perspective protection of rare mammal species in the nature reserves of

Tajikistan.

Journal Title (10): Proceedings of III All-Union conference. Rare mammal species and

their protection.

Date of Publication (20): 1983

Volume ID (22):

Location in Work (25): 9-10

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In winter, some seven to 14 snow leopards come into the nature reserve "Ramit" when chasing ibex within their winter habitats. The nature reserve is yet the only remaining place for ibexes to winter in eastern part of the Gissar ridge. Some 150 – 200 ibexes winter in the nature reserve. The nature reserve should be extended towards highlands in

order to protect snow leopards.

Keywords (45): Tajikistan/ snow leopard/ ibex/ protection.

Reference Type:

Author, Analytic (01): Grachev Yu. A.

Title, Analytic (04): Snow leopard, or irbis *Uncia uncia*.

Journal Title (10): Red Data Book of the Kazakh SSR.

Date of Publication (20): 1978

Volume ID (22): Part 1. Vertebrate animals.

Location in Work (25): 64-67

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard is rare and endangered species. At present it is met in Tien Shan and the spurs: in the ridges of Pskem, Ugam, Karjantau, Talas, Kyrgyz, Zailiyskiy, Ketmene, Kungei Alatau, Terskey Alatau, as well as Jungar Alatau, Tarbagatai, Saure, and Altai. In 19th century, snow leopard used to be met in the Karatau ridge (the Syrdarya ridge). Over the last two decades population of snow leopard reduced due to increased development of mountainous areas and reduction of wild animal populations (ibex, argali, morals, marmots, etc.). In Kazakhstan, snow leopard is protected in the Aksu-Djabagly and Alma-Ata nature reserves.

Keywords (45): Kazakhstan/ snow leopard/ distribution/ historical range/ conservation.

Reference Type:

Author, Analytic (01): Grachev Yu. A.

Title, Analytic (04): Snow leopard *Uncia uncia* Sch. 1775.

Journal Title (10): Red Data Book of the Kazakh SSR.

Date of Publication (20): 1991

Volume ID (22): Vol. 1. Animals.

Location in Work (25): 73-75

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard is a rare species with shrinking habitat and decreasing population (category III). It is distributed in Tien Shan (the ridges of Karjantau, Ugam, Talas, Kyrgyz, Zailiyskiy, Kunghey, Terskey, Ketmen), Djungar Alatau, Tarbagatai, Saur, and South Altai. This species has disappeared in the Syrdarya Karatau and the mountains of North Tien Shan. Its total number in Kazakhstan is estimated to be 180-200 animals. The threats are reduction of mountain ungulates and poaching. Snow leopard is protected in the Aksu-Djabagly, Alma-Ata, and Markakol nature reserves and the Alma-Ata, Lepsin, and Tokhta sanctuaries. The Djungar nature reserve needs to be established.

Keywords (45): Kazakhstan/ Red Data boo/ category of threat/ distribution/ number/ biology/ threats/ conservation measures.

Reference Type:

Author, Analytic (01): Grachev Yu.A.

Title, Analytic (04): Snow leopard.

Journal Title (10): The Red data book of Kazakhstan.

Date of Publication (20): 1996

Volume ID (22): Vol.1.Animals. Part 1.Vertebrates.

Location in Work (25): 246-247

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Status: rare (Category III). Distribution: Tien Shan mountains, Tarbagatai, Saur and Altai mountains. Total number in Kazakhstan does not exceed 200 individuals. The main threats are poaching and reduction number of preys. In Almaty Zoo captive breeding was successful in 1976 and 1985. Snow leopard is protected in Aksu Jabagly, Almaty and Markakol nature reserves. To ensure the survival of the species it is necessary to establish a reserve in Dzhungar mountains and to improve protection in existing nature reserves.

Keywords (45): Kazakhstan/ Red data book/ category of threat/ distribution/ number/ conservation measure/ captive breeding/ snow leopard.

Reference Type:

Author, Analytic (01): Gromov I.M., Gureev A.A., Novikov G.A., Sokolov I.I., Strelkov

P.P., Chapsky K.K.

Title, Analytic (04): Felis (Uncia) uncia Schreber (1776) – leopard or irbis.

Journal Title (10): The mammals of USSR.

Date of Publication (20): 1963

Volume ID (22): Part.2.

Location in Work (25): 890-892

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): An identification table for genus and species of mammals of USSR is given. The taxonomy, morphology, distribution and life history

are described. The features of snow leopard Felis (Uncia) uncia,

distribution, biology and practical value are described.

Keywords (45): USSR/ taxonomy/ morphology/ distribution/ biology/ value/ snow

leopard.

Reference Type:

Author, Analytic (01): Gulyaeva T. S., Muzalevskaya L. A.

Title, Analytic (04): About protection of natural complexes in south Altai.

Journal Title (10): Geographical problems of wildlife protection development.

Date of Publication (20): 1986

Volume ID (22):

Location in Work (25): 68-69

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): To ensure proper conservation of valuable natural complexes it is proposed that a nature reserve be established in the upper river Bakhturma. There are over 20 mammal species there, dhole and snow leopard being included in the Red Data Book of the Kazakh SSR and Red List of IUCN.

Keywords (45): Kazakhstan/ Altai/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Gvozdetskiy N. A., Makhailov N. I.

Title, Analytic (04): Altitudal landscape zones.

Journal Title (10): Physical geography of the USSR.

Date of Publication (20): 1970

Volume ID (22):

Location in Work (25): 142-151

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides geobotanic and zoogeographic description of vertical landscape zoning. Particularly, in alpine meadows and meadow steppes and partially zone of mountain plateau ("syrt") of highland, the common species are argali (*Ovis ammon poloi*), ibex (*Capra sibirica sakeen*), snow leopard (*Felis uncia*), Tien Shan bear (*Ursus arctos leuconyx*), and red pica; very numerous are marmots and vole (*Microtus gregalis*). The bird fauna includes Himalayan snow-cock (*Tetraogallus himalayensis*), Alpine chough (*Pyrrhocorax graculus*), chough (*P. pyrrhocorax*), horned lark (*Eremophila alpestris*), rosefinch species. There are many waterfowl birds on the lakes. There are many Central Asian, particularly Tibetan species among the animals inhabiting highlands of the Tien Shan.

Keywords (45): Central Asia/ geobotany/ zoogeography/ mountain zones/ animals/ snow leopard.

Reference Type:

Author, Analytic (01): Gvozdev E.V., Andrejchuk A.L.

Title, Analytic (04): Dzhungarsky nature reserve.

Journal Title (10): Perspectives of creation of protected areas fund in Kazakhstan.

Date of Publication (20): 1989

Volume ID (22):

Location in Work (25): 31-34

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Fauna of the mammals in Dzungarian Ala Tau included 54 species, from them in IUCN Red book, the Red Data book of USSR and Kazakh Red Data Book listed snow leopard, dhole, brown bear, Central Asian otter, Turkestan lynx, manul, argali, marbled polecat and stone marten. Institute of geography of Kazakhstan offers the project on creation of protected territory on Dzungarian Ala Tau for biodiversity conservation and increase in number of rare and disappearing species.

Keywords (45): Kazakhstan/ Dzungarian Ala Tau/ biodiversity/ mammals/ snow leopard/ protected area creation.

Reference Type:

Author, Analytic (01): Heiz A. V.

Title, Analytic (04): Some legal issues of snow leopard protection in the USSR.

Journal Title (10): Environment fundamentals of protection and sustainable use of predatory mammals.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 244-245

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Any commercial use or sport hunting for snow leopard is prohibited everywhere. In the USSR, illegal hunting or attempt to hunt was prosecuted according to the criminal or administrative law. The following additional measures are required to successfully protect the species: conducting awareness activity in local communities, continuous control, quick investigating of snow leopard extermination cases, and regular counts of snow leopard population.

Keywords (45): USSR/snow leopard/ criminal responsibility/ management responsibility/ liability for breakage/ protection/ propaganda/ counts.

Reference Type:

Author, Analytic (01): Heiz A. V., Zadorozhniy N. N., Kirianov A.G.

Title, Analytic (04): Snow leopard in Kyrgyzstan and its protection.

Journal Title (10): Rare mammal species of the USSR and their protection.

Date of Publication (20): 1983

Volume ID (22): 3

Location in Work (25): 92-93

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In the year 1970, the quantity of snow leopards in Kyrgyzstan was defined as 1,300 animals, while in the years to follow 1,600 animals were recorded. A snow leopard population has significantly decreased since recently because of intense extermination of snow leopard's prey – ungulates, particularly ibex. In some areas of the Kyrgyz ridge livestock is growing in number thus affecting snow leopard population. It is extremely rare that snow leopard would attack livestock. Snow leopards can be caught under special license. Educational and awareness work among shepherds and hunters residing in the mountainous area of the country needs to be improved.

Keywords (45): Kyrgyzstan/ snow leopard/ number/ decline/ mountain ungulates/ livestock/ hunting/ propaganda/ protection.

Reference Type:

Author, Analytic (01): Ishunin G. I.

Title, Analytic (04): Irbis, or snow leopard — Felis (Uncia) uncia Schreber 1778.

Journal Title (10): Fauna of the Uzbek SSR. Mammals (predators and ungulates).

Date of Publication (20): 1961

Volume ID (22): Vol. 3.

Location in Work (25): 127-131

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes diagnostic signs and taxonomy of snow leopard as well as its distribution, behavioral patterns and use in Uzbekistan. This predator inhabits the Ugam, Pskem, Chatkal, Turkistan, and Gissar ridges. It mainly preys on ibex, and marmots, vole-mouse, and snowcocks. Sometimes it attacks domestic sheep. Snow leopard is of low commercial value. The cost of skin is 4 roubles 70 kopecks. Only a few

skins are purchased.

Keywords (45): Uzbekistan/ snow leopard/ taxonomy/ distribution/ behavior/ practical use.

Reference Type:

Author, Analytic (01): Ishunin G. I.

Title, Analytic (04): Game and rare animals of Uzbekistan and their protection.

Journal Title (10): Proceedings of the First International congress on mammals.

Date of Publication (20): 1974

Volume ID (22): 1

Location in Work (25): 243-244

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Totally in Uzbekistan inhabited about 40 game species, but many of them became rare (Mellivora capensis indica, Lutra lutra seistanica, Hyaena hyaena, Felis pardus ciscaucasicus, Felis uncia, Felis cazacal michaelis, F.manul ferrugineus, Cervus elaphus bactrianus, Capea falconeri heptneri, Ovis orientalis bochariensis, O. about severtsovi, About ammon kazelini), from fauna of region have disappeared Cuon alpinus hesperius, Panthera tigris virgata, Acionyx jubatus, Cervus elaphus sibiricus, Equus hemionus, E. pezewalskii, Camelus bactrianus. For protection of valuable species of animals in Uzbekistan 6 nature reserves and 6 zakazniks were established.

Keywords (45): Uzbekistan/ game species/ rare species/ conservation/ snow leopard.

Reference Type:

Author, Analytic (01): Ishunin G. I.

Title, Analytic (04): Protected areas and waters of Uzbekistan.

Journal Title (10): Hunter and Fisherman of Uzbekistan.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 49-63

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Uzbekistan, there is a network of protected areas of land and water, consisting of 11 nature reserves (163,780 ha) and nine sanctuaries (217,837 ha). Five or six new protected natural areas with a total area of 220,000 – 250,000 ha are recommended to be established. The further development of the network will help preserve typical natural complexes, having scientific, practical and cultural value. When selecting an area for protection it is needed to cover overall diversity of natural landscapes including relief, soils, waters, vegetation and animals. Snow leopard is protected in the Chatkal, Zaamin, Kizilsu, and Miraka nature reserves.

Keywords (45): Uzbekistan/ protected areas/ snow leopard/ territorial protection.

Reference Type:

Author, Analytic (01): Ishunin G. I.

Title, Analytic (04): A problem of original fauna conservation in Uzbekistan.

Journal Title (10): Proceedings of VII All-Union zoogeographical conference.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 199-200

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Fauna of Uzbekistan is represented by species being common for south deserts (Indian honey badger, striped hyena, cheetah, caracal), *tugai* forest (riverine forest) (Bukhara deer, jackal, chaus, tiger), Palaearctic steppes (corsac, steppe polecat, marbled polecat, steppe cat, saiga), deserts of Africa and Middle East (sand cat, tridactylous African jerboa) and steppes of Central Asia (dhole, snow leopard, ibex). There are many foxes, large susliks, and muskrats there. Before hunting was prohibited a very few animals belonging to rare species such as bear, otter, leopard, snow leopard, lynx, roe deer, Bukhara deer, markhor, Asian moufflon, argali, Menzbier's marmot, and sometimes honey badger, caracal, manul, and cheetah, were shot.

Keywords (45): Uzbekistan/ mammals/ origin/ game species/ snow leopard.

Reference Type:

Author, Analytic (01): Ishunin G. I.

Title, Analytic (04): Snow leopard.

Journal Title (10): Wild animals of Uzbekistan included in the Red Data Book of the USSR.

Date of Publication (20): 1980

Volume ID (22):

Location in Work (25): 26-27

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Uzbekistan, snow leopard is preserved along the Ugam, Pskem, Chatkal, Tirkestan, and Hissar ridges. Ibex is a main prey of the

predator. It also preys on argali, wild boar, hares, roe-deers, rodents, kekliks (partridge), and rarely livestock. Catching the animals in the

country is limited and exercised under special permissions.

Keywords (45): Uzbekistan/ Red data book/ snow leopard/ distribution/ preys/ biology/

use.

Reference Type:

Author, Analytic (01): Ishunin G. I.

Title, Analytic (04): Hunting and nature conservation in Uzbekistan (history and current

status).

Journal Title (10): Hunting and nature conservation in Uzbekistan.

Date of Publication (20): 1984

Volume ID (22):

Location in Work (25): 9-21

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Origination of fauna complexes in Uzbekistan from the Mustier period to present time is described. The remains of brown bear, cave hyena, wolf, fox, corsac, stone marten, badger, and snow leopard were found in cave Amankutan (western extremities of the Zaravshan ridge). Cattle breeding and farming has begun since mesolite; cave bear, Stenon horse, Pleistocene donkey, camel and aurochs dropped from the region's fauna, while marchor and striped hyena moved to the Hissar ridge. Babatag and Kugitang mountains from south; jackal, chaus, tiger, and Iranian otter settled along the river valleys. In the Neolith and Bronze Age cattle breeding and farming continued to develop, while hunting was less important. Mass hinting for animals in the time of Alexander the Great, Chingiz Khan, and Babur, the ruler of Fergana, is described. Mass extermination of kulan, goitered gazelle, saiga, and other game species also took place later -more than 12,000 saigas were killed during one hunt at the end of 19th century in the Volga region. Animals also die from natural disasters – the "djut". Data concerning a current status of goitered gazelle, saiga, Bukhara deer, marchor, Severtsey's sheep, and urial is given.

Keywords (45): Uzbekistan/ origin/ fauna/ fossils/ mesolite/ late Stone Age/the Bronze Age/ hunting/ agriculture/ stock-raising/ natural calamity/ conservation/ hunting farm/ snow leopard.

Reference Type:

Author, Analytic (01): Ishunin G. I.

Title, Analytic (04): Genus Snow leopard – *Uncia gray*, 1854.

Journal Title (10): Game animals of Uzbekistan.

Date of Publication (20): 1987

Volume ID (22):

Location in Work (25): 94-97

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides data concerning biology, distribution and use game and commercial mammal species in Uzbekistan, and recommends on ways of hunting and initial fur-skin processing. It also describes the matter of conservation and rehabilitation of rare species' populations. From 1930-s to 1960-s over 20 snow leopard skins were reported to be traded officially.

Keywords (45): Uzbekistan/ mammals/ game species/ biology/ distribution/ practical use/ conservation measures.

Reference Type:

Author, Analytic (01): Ishunin G. I., Allayarov A. A.

Title, Analytic (04): Cats.

Journal Title (10): Ecology and economic value of vertebrate animals in south Uzbekistan

(the Syrdarya river basin).

Date of Publication (20): 1964

Volume ID (22):

Location in Work (25): 37-43

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides information about the cat family species in Uzbekistan (steppe cat – Felis libyca, reed cat – Felis chaus, Turkistan lynx – Felis lynx isabellina, manul – Felis manul, sand cat – Felis margarita, Turan tiger – Felis tigris virgata, Middle Asia leopard – Felis pardus tullianus, and snow leopard – Felis uncia. Snow leopard is distributed over the Hissar ridge, and the mountains of Kuydytavak, Khoddjachilimakhram, Zardalyupaz, Khodjapiriyah and Belata. Trade significance of snow leopard is negligent. In the Sary-Asia district one skin was traded in 1934 and 1935, three – in 1936, four – in 1937, one

− in 1946, and two − in 1947.

Keywords (45): Uzbekistan/ South Uzbekistan/ cats/ distribution/ fur-trade/ snow leopard.

Reference Type:

Author, Analytic (01): Ishunin G. I., Diakin B. I.

Title, Analytic (04): Nature reserves and sanctuaries in Uzbekistan.

Journal Title (10): Biosphere protection and use of natural resources in the Uzbek SSR.

Date of Publication (20): 1978

Volume ID (22):

Location in Work (25): 55-61

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The protected area network in Uzbekistan is represented by 12 nature reserves (with total area of 254,000 ha) and nine sanctuaries (with total area of 217,837 ha). Protected territories and waters are divided into three types: desert, mountain, and floodplain lakes. Snow leopard is met in the Chatkal, Kizilsu, Miraka, and Zaamin nature reserves and Akbulak sanctuary.

Keywords (45): Uzbekistan/ protected areas/ fauna/ snow leopard.

Reference Type:

Author, Analytic (01): Ishunin G. I., Salikhbaev Kh. S.

Title, Analytic (04): Game mammals and birds of northern slopes of the Turkestan ridge.

Journal Title (10): Game and commercial animals of Uzbekistan.

Date of Publication (20): 1963

Volume ID (22):

Location in Work (25): 5-19

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There are 27 mammal species in the mountains of Turkestan ridge, 17 of which are good for trade or sport hunting. However, many of them have become non-numerous because of overhunting or destruction of their natural complexes (forest cutting, erosion, etc.). In Turkestan ridge of Uzbekistan, snow leopard is protected only in the Zaamin nature reserve.

Keywords (45): Uzbekistan/ Turkestan ridge/ game species/ endangered species/ snow leopard.

Reference Type:

Author, Analytic (01): Ishunin G. I., Tetyukhin G. F.

Title, Analytic (04): The Felids family – Felidae Gray, 1821

Journal Title (10): Possible way of the mammal fauna formation on the territory of

Uzbekistan.

Date of Publication (20): 1989

Volume ID (22):

Location in Work (25): 46

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Zoolites of the Felidae family are known from the Upper Eocene -Lower Pliocene in Eurasia, Africa, and North America. Two subfamilies are know to inhabit the territory of the USSR and adjacent territories: the extinct sabre-toothed Felidae species Machairodontia and now existing Felidae species. In the USSR the extinct Felidae species were found to exist in Upper Miocene, Upper and Middle Pliocene, and Pleistocene. In Eurasia panthers has been know since early Pliocene. Three species were found in Uzbekistan - the extinct cave lion Felidae spelaea (Goldfuss, 1810), and now existing Panthera tigris, Panthera pardus. The ancient finds and modern habitats are briefly described. Genus *Uncia* is represented by one species – snow leopard or irbis. Probably it appeared in later Pliocene or Pleistocene in the mountain of Central Asia. In Uzbekistan, remains of snow leopard were found in the Samargand region in the layer of Upper Pleistocene or Holocene. Probably it moved into the area in Pleistocene or the period of glacier removal in the Western Tien Shan mountains, Turkestan, Zeravshan, and Hissar ridges.

Keywords (45): USSR/ Felidae/ Miocene/ Pliocene/ Pleistocene/ Holocene/ origin/ Uzbekistan/ Genus Uncia/ snow leopard/ specie range/ Western Tien Shan/ Hissar ridge/ Zeravshan ridge/ Turkestan ridge.

Reference Type:

Author, Analytic (01): Ismagilov M. I.

Title, Analytic (04): Protection of rare mammals in Kazakhstan.

Journal Title (10): Population variability of species, and mammal gene bank conservation

problems.

Date of Publication (20): 1983

Volume ID (22):

Location in Work (25): 230-232

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The following rare mammals can be found in nature reserves of Kazakhstan: argali, goitered gazelle, kulan, snow leopard, stone marten, Tien Shan brown bear, manul, Turkistan lynx, Menzbier's marmot, and porcupine. The rest of rare mammal species (three insectivorous species, seven - rodent, eight - predator, and two ungulate species) are outside of protected areas and require special

protection measures.

Keywords (45): Kazakhstan/ nature reserves/ mammals/ rare species/ ungulates/

carnivores/ rodents/ insectivores/ bats/ snow leopard.

Reference Type:

Author, Analytic (01): Janyspaev A.D.

Title, Analytic (04): The area and numbers of Snow Leopard in the central part of Zailiysky

Alatau

Journal Title (10): Selevinia. The zoological journal of Kazakhstan.

Date of Publication (20): 2002

Volume ID (22): N 1-4.

Location in Work (25): 208-212

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): This article summarizes the information about snow leopard and it's

preys in Almaty nature reserve and neighboring areas since 1979 year.

Some increasing of irbis number is recognized last 20 years.

Keywords (45): Kazakhstan/ Almaty nature reserve/ snow leopard/ ibex/ roe deer/

poachers/ number increasing.

Reference Type:

Author, Analytic (01): Joost van der Ven

Title, Analytic (04): Western Tien Shan: nature as it is.

Journal Title (10): Biodiversity of the West Tien Shan. Status and perspectives.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 51-67

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Some ideas of biodiversity conservation in the West Tien Shan (first of all – large mammals such as ibex, moral, brown bear, and snow leopard) including an idea of limited trophy hunt are discussed.

Keywords (45): Western Tien Shan/ biodiversiry/ sustainable use/ trophy hunt/ endangered species/ snow leopard.

Reference Type:

Author, Analytic (01): Jumaev T.

Title, Analytic (04): Fauna. Nature protection in mountains and nature reserves.

Journal Title (10): Mountains of Uzbekistan. Nature, Economy, Vocations.

Date of Publication (20): 1989

Volume ID (22):

Location in Work (25): 89-91, 109-118.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Uzbekistan's mountain fauna is characterized by the presence of species endemic to Central Asia, and species typical for Mediterranean, India, Afghanistan, the mountains of Central Asia, Mongolia, Siberia, and other neighbouring countries and regions. Of 300 mammals of the USSR, more than 120 inhabit mountains of Central Asia. More diverse is the bird fauna (500 species) and fish fauna. The mountain species are distributed according to the highland zoning. The fauna of highland zone is very peculiar: brown bear, snow leopard, ermine, weasel, wolf, Siberian ibex, argali, and marmot. The following species are under protection in the mountain nature reserves in Uzbekistan: Siberian ibex, roe-deer, Menzbier's marmot, stone marten, ermine, Turkistan lynx, Tien Shan brown bear, Severtsev's sheep, wild boar, marbled polecat, steppe cat, porcupine, snow leopard, otter, badger, long-tailed marmot, marchor, urial, etc. Development of the area resulted in disappearance of Caspian tiger and dhole. The endangered species are cheetah, North Persian leopard, striped hyena, houbara bustard; extremely endangered are Transcaspian urial, marchor, otter, black stock, etc.

Keywords (45): Uzbekistan/ fauna/ endemics/ altitudinal zonality/ nature reserves/ / human activity/snow leopard.

Reference Type:

Author, Analytic (01): Kadamshoev M.

Title, Analytic (04): Establishment of highland nature reserves required.

Journal Title (10): Nature reserves of the USSR.

Date of Publication (20): 1990

Volume ID (22): Part 1.

Location in Work (25): 227-228

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Human population growth in the Mountain Badakhshan autonomous province will result in changes of wild life habitat. The first highland nature reserve (Muksu river basin) is proposed to be established within the habitat of Marco Polo sheep, Siberian ibex, Tien Shan brown bear, snow leopard, Himalayan and Tibetan snow-cock, bar-headed goose, bearded and Himalayan vultures. The Mountain Badakhshan nature reserve will serve as a reference for other highland landscapes of the USSR, a 'fiduciary' of gene bank containing valuable endemic, rare, and endangered animal and plant species.

Keywords (45): Tajikistan/ Pamir/ Mountain Badakhshan/ nature reserves/ endemics/ rare species/ snow leopard/ tourism.

Reference Type:

Author, Analytic (01): Kaletskiy A. A.

Title, Analytic (04): May-"traven".

Journal Title (10): Kaleidoscope of naturalist.

Date of Publication (20): 1974

Volume ID (22):

Location in Work (25): 60-75

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Diverse flora and fauna and seasonal phenomena in nature are stated in a popular form. Snow leopard is noticed to be a rare species, its population being significantly influenced by catching for zoos: over 400 snow leopards have been caught for this purpose over the last 35

Keywords (45): USSR/ flora/ fauna/ snow leopard/ use.

Reference Type:

Author, Analytic (01): Kaletskiy A., Shishkin I.

Title, Analytic (04): They must live.

Journal Title (10): Man and nature.

Date of Publication (20): 1978

Volume ID (22): N 11.

Location in Work (25):

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Among large predators included in the Red Data Book of the USSR and Red List of IUCN the author describes snow leopard. A population of snow leopard in the USSR is estimated to be 500 animals, and no more than 1,000 – in the world. In the past, *irbis* was believed to be a harmful animal and hunting for this species was encouraged. Today, population of the predator is reducing because of poaching and decreasing number of species it preys on such as ibex, wild sheep, wild boar, and marmots. The situation is exacerbated by biological features of this species – first of all – its slow rate of reproduction. It is concluded that snow leopard needs urgent protection measures since the species is on the verge of disappearance.

Keywords (45): USSR/ Red Data book/ endangeres species/ threats/ conservation measures/ snow leopard.

Reference Type:

Author, Analytic (01): Kamelin R.V.

Title, Analytic (04): The Hissar Nature reserve.

Journal Title (10): Nature reserves of Central Asia and Kazakhstan.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 272-282

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides general information about the Hissar nature reserve (Uzbekistan), its physico-geographical features and description of flora and fauna. The following predator species inhabit the nature reserve: wolf, fox, Tien Shan brown bear (four – five animals per 100 sq. km), ermine, weasel, stone marten, otter, badger, lynx (two animals per 100 sq. km) and snow leopard (about 10 animals). Wild boar and ibex are common species for the area (22 – 25 animals per 100 sq. km).

Keywords (45): Uzbekistan/ Hissar nature reserve/ location/ climate/ soils/ flora/ fauna/ mammals/ number/ snow leopard.

Reference Type:

Author, Analytic (01): Kashkarov D. N.

Title, Analytic (04). Living conditions and living in various parts of the mountainous

Turkestan. Central Asian snow leopard, irbis.

Journal Title (10): The animals of Turkestan, their life and importance for man. Popular

essays.

Date of Publication (20): 1923

Volume ID (22): Issue 2. The animals of mountainous Turkistan.

Location in Work (25): 3-6, 21

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes fauna of the mountainous Turkestan. *Irbis* is met in Tien Shan, Pamir, Bukhara and Kopet-Dag. Apart from Turkistan, it lives in the Altai, Tibet and on northern slopes of the Himalayas. In Kopet-Dag, this species is met with another panther – Caucasian leopard. It preys on ibex, wild sheep, roe deer, keklik (partridge), snow-cock and porcupine. It also attacks small livestock. Normally this species would never attack the man though hunters mentioned some cases that evidence otherwise.

Keywords (45): Turkestan/ fauna/ mammals/ snow leopard/ distribution/ biology/ preys.

Reference Type:

Author, Analytic (01): Kashkarov D. N.

Title, Analytic (04): From lake Sary-Chelek to pass Air-Bel. Mammals.

Journal Title (10): Results of the expedition by The Main Central Asia Museum to the

area of lake Sary-Chelek.

Date of Publication (20): 1927

Volume ID (22):

Location in Work (25): 21-23, 98-102.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The author provides results of the expedition in the vicinity of lake Sary-Chelek, Kyrgyzstan. With reference to the local people he indicates the presence of irbis (*Leopardus uncia*), bear (*Ursus leuconyx*), dhole (*Cyon alpinus*) around Air-Bel. Livestock attracts the

predators and every day shepherds find one sheep missing.

Keywords (45): Kyrgyzstan/ fauna/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Kashkarov D. N.

Title, Analytic (04): Order Carnivora- Carnivores. Family Felidae-Cats.

Journal Title (10): Animals of Turkestan.

Date of Publication (20): 1932

Volume ID (22):

Location in Work (25): 392-393

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard inhabits Tien Shan, Pamir, Bukhara and possibly Kopetdag, as well as the Altai, Tibet, and northern slopes of the Himalayas. It preys on ibex, wild sheep, roe deer, hare, keklik (partridge), snow-cock and porcupine and sometimes attacks livestock. Snow leopard is not considered a dangerous animal since even being wounded, it would escape from men and could only rush to the attack when deadlocked.

Keywords (45): Turkestan/ carnivores/ cats/ snow leopard/ distribution/ biology/ preys.

Reference Type:

Author, Analytic (01): Kashkarov D. N., Stanchinskiy V. V.

Title, Analytic (04): The cat family (Felidae).

Journal Title (10): A course of zoology. Vertebrate animals.

Date of Publication (20): 1935

Volume ID (22):

Location in Work (25): 676, 780

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A taxonomic characteristic of family Felidae is given. A brief description of the origin and distribution of modern Felidae species is provided. Snow leopard (*Felis uncia*) is noticed to be met in the mountains of Central Asia. It says that though being a rare species, snow leopard, together with leopard and tiger, causes a considerable damage by exterminating large ungulates and sometimes attacking man.

Keywords (45): Felidae/ taxonomy/ origin/ snow leopard/ distribution/ preys.

Reference Type:

Author, Analytic (01): Kashkarov D. Yu.

Title, Analytic (04): Rare finds of fauna in the West Tien Shan.

Journal Title (10): Biodiversity of Western Tien Shan: conservation and sustainable use.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 106-107

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Collected are additional data on encounters with six rare animal species that have been never seen before in the West Tien Shan. These are free-toiled bat, Etruscan shrew, snow leopard, little forktail, urban swallow, Central Asia tortoise, and Kyrgyz racerunner.

Keywords (45): Uzbekistan/ Western Tien Shan/ Chatkal ridge/ Chirchik river upper/ rare species/ new records/ snow leopard.

Reference Type:

Author, Analytic (01): Kashkarov R.

Title, Analytic (04): About mammals fauna (Carnivora and Artiodactyla) of Pskem Rivers

Journal Title (10): Selevinia. The zoological journal of Kazakhstan.

Date of Publication (20): 2002

Volume ID (22): N 1-4.

Location in Work (25): 150-158

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The article is based on the results of Transboundary project GEF expedition to the upper part of Pskem Rivers basin, July 27-Septeber 7, 2002. The past and present distribution and status of Carnivora and Artiodactyla is described using the gathered data and literature. There is a cadastre list with the place of the records for every species. For the most rare species a map-scheme is given/

Keywords (45): Uzbekistan/ Pskem River basin/ Bostandyk region/ fauna/ rare species/ Carnivora/ Artiodactyla/ number/ decline/ snow leopard.

Reference Type:

Author, Analytic (01): Kashkadarinskaya Pravda Newspaper.

Title, Analytic (04): Snow leopard goes to Frunze.

Journal Title (10): Newspaper Kashkadarinskaya Pravda.

Date of Publication (20): July 20th 1983

Volume ID (22): 79 (26-11)

Location in Work (25):

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In canyon Karakol of the Alatoo ridge, a snow leopard was caught for a zoo of Frunze.

Keywords (45): Uzbekistan/ Alatoo mountain/ Karakol gorge/ snow leopard/ catching/ Zoo.

Reference Type:

Author, Analytic (01): Kataevsky V.N., Davronov E.

Title, Analytic (04): Specific of fauna of mammals in Besh Aral nature reserve.

Journal Title (10): Biodiversity of Western Tien Shan. Status and perspectives.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 139-142

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Diversity of mammals in Besh Aral nature reserve, Kyrgyzstan is presented. Also analysis of the density of mammals in their habitats is given. Totally 31 mammals inhabited in nature reserve: 13 rodents, 11 carnivores, 3 ungulates, 2 hares, 1 insectivore and 1 bat. Number of snow leopard assessed as 8 individuals, Turkestan lynx – 10, wild boar – 100 and ibex – 400 individuals. Snow leopard and Menzbier's marmot included in national Red data Book as well as in Global Red

Keywords (45): Kyrgyzstan/ Besh Aral nature reserve/ mammals/ number/ snow leopard/ lynx/ ibex/ wild boar.

Reference Type:

Author, Analytic (01): Kataevsky V.N., Davronov E.

Title, Analytic (04): Mammals of Sary Chelek nature reserve.

Journal Title (10): Biodiversity of Western Tien Shan. Status and perspectives.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 143-145

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The 30 species of mammals are presented in Sary Chelek nature reserve, Kyrgyzstan. Comparison of status of mammal's diversity in Soviet period and present time is made. Number decrease for some mammals is noted. Number of snow leopard in Sary Chelek is 2 individuals, Turkestan lynx – 3, wolf – 10, bear – 20, badger – 20, fox – 25, jackal – 25, wild boar – 100 individuals. Snow leopard included in national Red data Book and Global Red List.

Keywords (45): Kyrgyzstan/ Sary Chelek nature reserve/ mammals/ number decrease/ snow leopard/ lynx/ bear/ wolf/ badger/ fox/ jackal/ wild boar.

Reference Type:

Author, Analytic (01): Kogan M. I.

Title, Analytic (04): The Kazakh SSR. The Kyrgyz SSR. The Uzbek and Tajik SSR. The

Turkmen SSR.

Journal Title (10): Soviet Asia as a fur-trade region.

Date of Publication (20): 1931

Volume ID (22):

Location in Work (25): 47, 51-52,55-57, 59, 61-62.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes geographical, soil, climatic and hydrological features of Kazakhstan, Kyrgyzstan, Uzbekistan, and Tajikistan. Types of economic activities including fur-trade are described, too. Game preserves are classified, and list of game fauna species inhabiting these republics is given. Snow leopard lives in rocky mountains and is

hunted very rarely.

Keywords (45): Central Asia/ game species/ fur-trade/ snow leopard.

Reference Type:

Author, Analytic (01): Kolbintsev V. G.

Title, Analytic (04): The role of the Aksu-Djabagly nature reserve in the vertebrate animals

gene pool conservation.

Journal Title (10): Nature reserves of the USSR – future and present.

Date of Publication (20): 1990

Volume ID (22): Part 3.

Location in Work (25): 254-256

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The Aksu-Djabagly nature reserve is a real guarantor for conservation of gene pool of five species – Tien Shan bear, golden eagle, bearded vulture, Blue whistling thrush, and probably Central Asia stone marten. To strengthen the role of the nature reserve in the rare species conservation it is necessary to extend its area to a number of additional land plots belonging to forestries.

Keywords (45): Kazakhstan/ Aksu-Jabagly nature reserve/ gene pool/ fauna/ rare species/ mammals/ birds/ snow leopard.

Reference Type:

Author, Analytic (01): Kolbintsev V.G.

Title, Analytic (04): Modern status of endangered vertebrates in Aksu Jabagly nature

reserve.

Journal Title (10): Biodiversity of W Tien Shan (Kazakhstan). Proceedings of Aksu

Jabagly State nature reserve.

Date of Publication (20): 2001

Volume ID (22): Vol.8.

Location in Work (25): 139-140

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Data on number of several endangered vertebrates inhabiting in Aksu

Jabagly nature reserve in 1990-2000 are given. Number of snow

leopard is rather stable and evaluated as 2-3 pairs.

Keywords (45): Kazakhstan/ Aksu Jabagly nature reserve/ endangered vertebrates/

number/ snow leopard.

Reference Type:

Author, Analytic (01): Kolosov A. M.

Title, Analytic (04): Central Asia.

Journal Title (10): Protection and enrichment of the USSR fauna.

Date of Publication (20): 1975

Volume ID (22):

Location in Work (25): 93-104

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes a mammal species composition in the mountain ecosystems of Central Asia – Kopetdag, Hissaro-Alai and Pamir, Tien Shan, and Tarbagatai ridge. Data on distribution and population number is presented.

Keywords (45): Central Asia/ mountain system/ species composition/ distribution/ number/ habitats/ rare species/ endemics/ game species/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Kolosov A. M., Lavrov N. P., Naumov S. P.

Title, Analytic (04): Snow leopard, or irbis, - Felis uncia Schreb.

Journal Title (10): Biology of commercial game animals in the USSR.

Date of Publication (20): 1961

Volume ID (22):

Location in Work (25): 89-90

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes appearance, distribution and behavioral patterns of snow leopard in the USSR. The predator inhabits the mountains of Kyrgyzstan, Kazakhstan, Tajikistan, and the Altai and mainly feeds upon ungulates, and also snow-cocks, marmots, small birds, and rodents. Sometimes attacks sheep. Number of snow leopards is very

Keywords (45): USSR/ snow leopard/ systematic position/ life-history/ distribution/ number/ preys.

Reference Type:

Author, Analytic (01): Kolosov A. M., Lavrov N. P.

Title, Analytic (04): The mountains of Central Asia.

Journal Title (10): Enrichment of game fauna in the USSR.

Date of Publication (20): 1968

Volume ID (22):

Location in Work (25): 40-41

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides description of main game animals in the USSR, considers a matter of rare species conservation, as well as keeping, breeding and feeding the species and enriching fauna by means of acclimatization. Snow leopard is indicated to inhabit the Tien-Shan Mountains along with species such as ibex, roe deer, moral, lynx, and others, and the mountains of Siberia along with argali, ibex, lynx, sable, glutton, etc.

Keywords (45): USSR/ game species/ distribution/ captive breeding/ conservation/ snow leopard.

Reference Type:

Author, Analytic (01): Kolosov A. M., Lavrov N. P., Naumov S. P.

Title, Analytic (04): Genus Snow leopards *Uncia*.

Journal Title (10): Biology of game animals in the USSR.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 150-151

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides description of appearance, distribution, behavioral patterns, and use of snow leopard in the USSR. The predator inhabits the mountains of Central Asia, east of the Amudarya river, along the ridges of Djungar Ala-Tau and Tarbagatai, South Altai, West and East Sayans. Its main food is ungulates, though it also preys on snow-cocks, marmots, small birds, and rodents. Sometimes attacks sheep. It has no enemy other than wolf; its diseases are not studied. Snow leopard is not dangerous for man. The fur-skin is used for making rugs and fur. Less than 1,000 animals are hunted globally. Before 1960, in the USSR less than 120 skins were annually purchased. Its total population is several thousand animals.

Keywords (45): USSR/ snow leopard/ systematic position/ life-history/ distribution/

number/ preys/ practical use.

Reference Type:

Author, Analytic (01): Korelov M.N.

Title, Analytic (04): The vertebrates of Bostandyk region.

Journal Title (10): Nature and economic conditions in the mountain part of Bostandyk.

Date of Publication (20): 1956

Volume ID (22):

Location in Work (25): 269, 314

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Data about faunistic complexes of Bostandyk region is provided. Snow leopard inhabited in high mountains of Chatkal, Pskem and Ugam ridges. The tracks of irbis were recorded in the snowfield near the edge of Pskem ridge (upper Ichnach-say river).

Keywords (45): Western Tien Shan/ fauna/ snow leopard/ distribution.

Reference Type:

Author, Analytic (01): Koshkarev E. P.

Title, Analytic (04): Snow leopard in Kyrgyzstan. The structure of habitat, ecology,

protection.

Journal Title (10):

Date of Publication (20): 1989

Volume ID (22):

Location in Work (25): 100 p.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Habitat, status of population, geographical distribution, number, and ecology of snow leopard in Tien Shan are analyzed based on original realistic material collected 1981 through 1988.

Information about *irbis* in the 'foreign' part of its habitat is given for comparison. The reasons for snow leopard habitat shrinkage in Central Asia and Kazakhstan for over 100 years are assessed. Status of ungulate populations snow leopard prey on is given. The predator's behavioral pattern and condition in enclosure are given consideration.

Protection measures are proposed.

Keywords (45): Kyzgyzstan/ snow leopard/ life-history/ distribution/ habitats/ number/ diet/ behavior/ conservation measures.

Reference Type:

Author, Analytic (01): Koshkarev E. P.

Title, Analytic (04): Geographic prerequisites for snow leopard conservation in the USSR.

Journal Title (10): Proceedings of V Congress of all-Union mammalogy' society of the

Academy of Science of the USSR.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 153-154

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Three key areas of the snow leopard habitat in the USSR are geographically segregated: Central Asia (Pamir, Tien Shan, Pamiro-Alai), East Kazakhstan (Jungar Alatau, Tarbagatai, Saur), and South Siberia (Altai, the Sayans), which are separated from one another. The fate of snow leopard in East Kazakhstan and South Siberia causes the most anxiety.

Keywords (45): Pamir/Pamir-Alai/Tien Shan/Jungar Alatau/Tarbagatai/Saur/Altai/Sayans/snow leopard.

Reference Type:

Author, Analytic (01): Koshkarev E. P.

Title, Analytic (04): Key areas of snow leopard's habitat as main conservation objects.

Journal Title (10): Environmental problems of wildlife protection.

Date of Publication (20): 1990

Volume ID (22): Part. 1.

Location in Work (25): 97-98

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The most vulnerable key areas within the snow leopard habitat are East Kazakhstan (an area of 48,000 square km) with no protected areas network established, and South Siberia (131,000 square km), where snow leopard is protected in three nature reserves. These areas are distant from main part of the habitat, isolated and have more extreme conditions. In Central Asia's key area (213,000 square km) linked to a main Chinese-Afghani part of the habitat, snow leopard was found in 11 nature reserves and two national parks. For reliable protection of this species it would be expedient to strengthen the role of the mountain nature reserves by means of extension and amalgamation of the areas, and other measures.

Keywords (45): Kazakhstan/ Southern Siberia/ Central Asia/ Talass ridge/ Chatkal ridge/ Zeravshan ridge/ Hissar ridge/ species range/ key sites/ snow leopard/ nature reserves.

Reference Type:

Author, Analytic (01): Koshkarev E.

Title, Analytic (04): Critical Ranges as Centres of Biodiversity.

Journal Title (10): Russian Conservation News.

Date of Publication (20): 1998

Volume ID (22): N 14

Location in Work (25): 37-38

Location/URL (38).

Notes (42): Full text available ...

Abstract (43): A high percentage of rare species in Central Asia experience limited conditions for distribution. Geographic centers with higher species diversity are generally constrained in terms of territory: they are formed when ranges overlap. But in Central Asia and along its borders with Russia, centers of biodiversity overlap at the very marginal edges of ranges. Central Asian species cross into Russian territory, where desert and steppe are replaced by thick forest. Here the northern borders of their ranges are sharply fragmented and isolated. Typical examples for Central Asia are the ranges of the cheetah (Acinonyx jubatus), Asian leopard (Panthera pardus caucasica), striped hyena (Hyaena hyaena), Bukhara deer (Census elaphus bactrianus), markhor (Capra falconeri), blue sheep (Pseudois nayauf) and argali (Ovis ammon). In Russia are the Altai subspecies of argali, the Siberian argali (O.a.ammon), the mountain goat (Capra sibirica), Mongolian gazelle (Procapra gutturosa), snow leopard (*Uncia uncia*), Pallas' cat (*Felis manul*), dhole (*Cuon alpinus*), grey marmot (Marmota baibacina), Mongolian marmot (M. sibirica) and tolai hare (Lepus tolai). Where the numbers of individuals has fallen to extreme lows, the most effective mechanism for species survival may be supporting the integrity of ranges, in order to preserve population exchanges between neighboring groups. The geographic location of reserves and other protected territories is vitally important for the survival of Central Asian species, given the acute fragmentation of their ranges. These reserves should include significant, viable centers of population — the key places. Wherever the creation of permanent protected territories is impossible, a new tactic must be found, such as introducing temporary limitations on the use of land for agriculture and hunting. But all protected territories, whether temporary or permanent, should be connected, forming a core and periphery. The marginal range areas must not be forgotten, if total protection of endangered populations is to be accomplished.

Keywords (45): Central Asia/ biodiversity/ rare species/ species survival/ snow leopard.

Reference Type:

Author, Analytic (01): Koshkarev E., Vyrypaev V.

Title, Analytic (04): What has happened to the snow leopard after the break-up of Soviet Union?

Journal Title (10): Nature conservation Journal.

Date of Publication (20): 2000

Volume ID (22): 4 (19)

Location in Work (25): 72

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes status of snow leopard in republics of the former Soviet Union, main reasons for poaching and negative and positive experience on species conservation. The total number of snow leopard in Kyrgyzstan and Tajikistan in the 1980's was at least 1200-1400. In Kazakhstan the snow leopard population totaled 180-200, in Uzbekistan around 100, and in Russia 150-200. The number and natural habitat of the species were in universal decline. Losses in Kyrgyzstan from poaching alone were no less than 30 animals per year in 1960-1980's. During this period the population in this area decreased by half, and the natural habitat by one third. With the break-up of the Soviet Union, poaching of the snow leopard and its pray grew by at least a factor of 3-4. It was estimated that 500-600 animals reduced the Kyrgyz snow leopard population in the 1990's. The population that remains today can barely be more than 150-200 individual snow leopards. The population has been physically decimated. Number of snow leopard in existence today in the former Soviet Union does not exceed 700-900 individual animals.

Keywords (45): Central Asia/ status/ poaching/ conservation measures/ snow leopard.

Reference Type:

Author, Analytic (01): Koshkarev E., Vyrypaev V.

Title, Analytic (04): About snow leopard.

Journal Title (10): Biological diversity of the West Tien Shan (Kazakhstan part).

Proceedings of the Aksu Jabagly state nature reserve.

Date of Publication (20): 2001

Volume ID (22): Vol. 8.

Location in Work (25): 148-151

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In 1980-s, in Central Asia there were 1,500-1,700 snow leopards: 800-900 – in Kyrgyzstan, 500 – in Tajikistan, 200 – in Kazakhstan, and 100 - in Uzbekistan. During the last century the number of snow leopard was constantly decreasing, though a its drastic reduction was observed after the collapse of the Soviet Union because of increased poaching for snow leopard and its objects of prey. The highest level of poaching was observed to occur in Kyrgyzstan. Kyrgyzstan's population of snow leopard reduced to 200 animals. A decrease of snow leopard number in other parts of its habitat with less intense hunting (Kazakhstan, Uzbekistan, south-west Kyrgyzstan) was mostly because of depletion of food resources (population of ungulates reduced five – eight times). The reasons are corruption and unemployment. In order to improve the situation it is required to improve regulatory framework and replicate existing positive experience in economic motivation of nature protection activities.

Keywords (45): Central Asia/ status/ poaching/ conservation measures/ snow leopard.

Reference Type:

Author, Analytic (01): Korytin S. A.

Title, Analytic (04): Animal's behavior near attractions. Animal's reaction to chasing with

dogs. Animal behavior and traps.

Journal Title (10): Habits of wild animals.

Date of Publication (20): 1986

Volume ID (22):

Location in Work (25): 49-51, 196-197, 278-279

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes trophic behavior of the cat family species (lion, tiger, leopard, snow leopard, cheetah, caracal, reed cat, wild cat and domestic cat), their reaction to dog-chasing and behavioral patterns when

trapped. Snow leopards (*Uncia uncia*) sometime eat dead animals. After killing the prey they take it away. *Irbis* eats the carcass, half-risen on front limbs, beginning from the chest and front limbs or lower part of belly, usually not touching intestines. It eats slowly and spends a lot of time near the carcass and returns to the carcass several times. Known are cases that two snow leopards, or a snow leopard and wolf eating the prey together. Snow leopard usually keeps birds off the carcass. If a man approaches snow leopard normally goes away, sometimes putting up with his close presence. Escaping from dogs, snow leopard was seen to plunge into the river. When trapped, snow

leopard rather easily surrenders to man.

Keywords (45): Cats/ behavior/ snow leopard.

Reference Type:

Author, Analytic (01): Kotlyar V. V.

Title, Analytic (04): The Sary Chelek nature reserve.

Journal Title (10):

Date of Publication (20): 1973

Volume ID (22):

Location in Work (25): 15

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The author describes flora and fauna of the Sary Chelek nature reserve. There are 40 mammal species in the nature reserve. Encounters with snow leopard are rather rare. Normally, it preys on ibex, mainly destroying weakened animals.

Keywords (45): Kyrgyzstan/ Sary Chelek nature reserve/ plants/ animals/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Kovalev A. K., Aliev T.

Title, Analytic (04): Marchor in the Ramit nature reserve, Tajikistan.

Journal Title (10): Nature reserves of the USSR – present and future.

Date of Publication (20): 1990

Volume ID (22): Vol.3.

Location in Work (25): 247-248

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The marchor habitat in Tajikistan is fragmented. The animals are reproduced in enclosures of the Ramit nature reserve and released into wildlife in Khel canyon. Two females were killed by snow leopard.

Keywords (45): Tajikistan/ Khazratishok ridge/ Darvaza ridge/ markhor/ number/ nature conservation/ zakaznik/ Ramit nature reserve/ captive breeding/ prey species/snow leopard.

Reference Type:

Author, Analytic (01): Kovshar A.F.

Title, Analytic (04): Aksu Jabagly nature reserve.

Journal Title (10): Protected areas of Soviet Union.

Date of Publication (20): 1969

Volume ID (22):

Location in Work (25): 464-474

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In territory of reserve and surrounding foothills 238 birds, 42 mammals, 9 reptiles, 2 amphibious and 2 fishes are registered. The mammal: argali, wild ibex, roe deer, red deer, a wild boar, snow leopard, steppe cat, a stone marten, ermine, red fox, badger, long-tailed marmot and Menzbier's marmot. Irbis is rare in reserve. Ibexes (numerous spesies) and wild sheep are main prey of the snow leopard. With the beginning of ibexes migration snow leopards follow them.

Keywords (45): Kazakhstan/ Aksu Jabagly nature reserve/ fauna/ mammals/ birds/ reptiles/ amphibians/ fishes/ snow leopard/ prey species.

Reference Type:

Author, Analytic (01): Kovshar A.F.

Title, Analytic (04): Soils. Plants and animals. Vertical zones.

Journal Title (10): Aksu Jabagly nature reserve. Guidebook for nature reserve.

Date of Publication (20): 1972

Volume ID (22):

Location in Work (25): 21-41

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A description of the Aksu Jabagly nature reserve is given and includes as follows: data of establishment, location, physic and geographic description, types of soils, climate, flora and fauna. In the nature reserve there are 238 birds, 42 mammals, 9 reptiles and 2 fishes. Snow leopard inhabited in the nature reserve.

Keywords (45): Kazakhstan/ Aklu Jabagly nature reserve/ establishment/ soil/ climate/ physiographic factors/ researching/ plants/ animals/ snow leopard.

Reference Type:

Author, Analytic (01): Kovshar A.F.

Title, Analytic (04): A problem of rare and endangered animal species in Kazakhstan.

Journal Title (10): Fauna of Kazakhstan and the conservation challenges.

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 99-101.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The Red Book of the Kazakh SSR includes 91 rare and endangered vertebrate animal species: 30 mammal, 48 bird, eight – reptile, one – amphibian, and four fish species. 26 species (Menzbier's marmot, marten species, lynx, snow leopard, and other species) became rare because of a direct anthropogenic pressure. The prohibition of hunting, conservation and rehabilitation of their habitats, reproduction in enclosures and preservation of some species' genomes is a way that would conserve rare species, the authors believe.

Keywords (45): Kazakhstan/ rare species / red data book/ mammals/ birds/ reptiles/ amphibians/ fishes/ snow leopard/ researching/ conservation/ hunting prohibition/ habitat restoration/ genome conservation.

Reference Type:

Author, Analytic (01): Kovshar A. F.

Title, Analytic (04): Preservation of gene pool of rare and endangered animal species.

Journal Title (10): The nature conservation in Kazakhstan.

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 100-107

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The rare species are protected in six nature reserves in Kazakhstan, including 9 mammals, 29 birds, and one reptile species. More than 20 rare and endangered species inhabiting Kazakhstan cannot be met within the nature reserves. The point is to establish a network of state nature reserves, particularly in steppe and desert area of the country.

Keywords (45): Kazakhstan/ gene pool/ rare species/ mammals/ ungulates/ carnivores/ snow leopard/ rodents/ birds/ reptiles/ amphibians/ fishes.

Reference Type:

Author, Analytic (01): Kovshar A. F.

Title, Analytic (04): The conservation of gene pool of rare and endangered animal species in nature reserves of the Kazakh SSR.

Journal Title (10): Study and protection of wildlife objects.

Date of Publication (20): 1984

Volume ID (22):

Location in Work (25): 5-7

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Five endangered predatory mammal species are protected in nature

reserves of Kazakhstan. Of which snow leopard and stone marten can be met in all mountain nature reserves, while Tien Shan bear and

Turkistan lynx – in the Alma-Ata and Aksu-Djabagly nature reserves.

Keywords (45): Kazakhstan/ endangered species/ distribution/ protected areas.

Reference Type:

Author, Analytic (01): Kovshar A. F.

Title, Analytic (04): About representativeness of terrain vertebrate fauna in the Aksu

Jabagly nature reserve for the whole West Tien Shan region.

Journal Title (10): Biological diversity of the West Tien Shan (the Kazakhstan part).

Proceedings of the Aksu Jabagly state nature reserve.

Date of Publication (20): 2001

Volume ID (22): Vol.8.

Location in Work (25): 97-99

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Mammals inhabiting the Aksu Jabagly nature reserve make up 79.6 percent of the whole mammal fauna of the West Tien Shan. The

following endangered species live in the area: argali, brown bear, dhole, Turkistan lynx, snow leopard, stone marten, porcupine, and free-

toiled bat. Snow leopard deserves a special attention.

Keywords (45): Kazakhstan/ Aksu Jabagly nature reserve/ mammals/ endangered

species/ snow leopard.

Reference Type:

Author, Analytic (01): Kovshar A. F., Fedosenko A. K.

Title, Analytic (04): A problem of conservation of rare and endangered vertebrate animals

in the mountains of southeast Kazakhstan.

Journal Title (10): Proceedings of All-Union Symposium "Mountainous geosystems of

intracontinental deserts and semi-deserts".

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 56-58

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Of 27 vertebrate animal species inhabiting the mountains of southeastern Kazakhstan and included in the Red Data Book of the USSR (1978) and Red Data Book of Kazakhstan (1978), 11 are mammals (free-toiled bat, Menzbier's marmot, dhole, Tien Shan brown bear, stone marten, otter, Turkistan lynx, snow leopard, manul, and argali). Snow leopard is met in the nature reserves Aksu Jabagly and Almaty. In the Almaty nature reserve snow leopard migrates outside the protected area following the ungulates. The extension of the nature reserve would improve the protection.

Keywords (45): Kazakhstan/ Red Data book/ protected areas/ snow leopard.

Reference Type:

Author, Analytic (01): Kovshar A. F., Bekenov A. B.

Title, Analytic (04): Snow leopard. Uncia uncia.

Journal Title (10): In the world of rare animals.

Date of Publication (20): 1985

Volume ID (22):

Location in Work (25): 85-86

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In the Soviet Union snow leopard inhabits highlands of Central Asia, Kazakhstan, Altai and the Sayans. In Kazakhstan, this species can be found in Jungara Alatau, Tien Shan, Tarbagatai, Saura, and Altai; formerly was seen at the Karatau ridge. It mostly preys on ibex and argali. The heat time is February – April, cubs are born in May – June. Its population has decrease because of the initiation of livestock grazing on mountain pastures, poaching, and wild ungulates population shrinkage. This species is protected in Aksu Jabagly and Almaty nature reserves. More nature reserves need to be established in Kyrgyzstan and Tajikistan.

Keywords (45): Kazakhstan/ snow leopard/ distribution/ diet/ wild ibex/ argali/ number/ breeding/ poaching/ over livestock/ nature reserves.

Reference Type:

Author, Analytic (01): Kovshar A. F., Kubykin R.A., Levin A. S., Mazin V.N.

Title, Analytic (04): Mammal - Mammalia.

Journal Title (10): Animals of Kazakhstan in photos.

Date of Publication (20): 1987

Volume ID (22):

Location in Work (25): 154

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Kazakhstan 160 species of mammal are inhabited. The snow leopard is rare and poor known inhabitant of highly mountain regions of

republic.

Keywords (45): Kazakhstan/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Kovshar A. F., Ivaschenko A. A.

Title, Analytic (04): The Aksu Jabagly nature reserve.

Journal Title (10): Nature reserves of Central Asia and Kazakhstan.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 80-102

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides general information about the Aksu Jabagly nature reserve (Kazakhstan), its physico-geographical features, description of flora and fauna. The rarest predator of the nature reserve is snow leopard. Its population is about 10 pairs. Its distribution and behavioral patterns are correlated with its main prey – ibex. In the past, snow leopard used to be a common species for the Talas Ala-Tau. Today its number has reduced.

Keywords (45): Kazakhstan/ Aksu Jabagly nature reserve/ location/ climate/ soils/ flora/ fauna/ snow leopard/ wild ibex.

Reference Type:

Author, Analytic (01): Kovshar A. F., Ivaschenko A. A., Kovshar V. A., Plakhov K. N.,

Yaschenko R. V., Kolbintsev V. G., Shakula V. F.

Title, Analytic (04): About the necessity to alter the border of Aksu Jabagly nature reserve.

Journal Title (10): Biological diversity of the West Tien Shan (the Kazakhstan part).

Proceedings of the Aksu Jabagly state nature reserve.

Date of Publication (20): 2001

Volume ID (22): Vol. 8.

Location in Work (25): 15-23

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): An extension of the Aksu Jabagly nature reserve is suggested in order to improve effectiveness of rare and endemic species conservation in the West Tien Shan. The existing area of the nature reserve is large enough for conservation and reproduction of most of the large mammal species such as ibex, bear, wild boar, snow leopard; the area is however insufficient for species such as Tien Shan argali, roe-deer, whose seasonal migrations extend beyond the area of the nature reserve, as well as Menzbier's marmot – a rare endemic to the West Tien Shan, whose habitat is situated 10 – 15 km from the nature reserve.

Keywords (45): Kazakhstan/ Aksu Jabagly nature reserve/ endemics/ endangered species/ widening/ improvement of protection.

Reference Type:

Author, Analytic (01): Krasilnikov N.

Title, Analytic (04): The spotty guest.

Journal Title (10): To friends-naturalists.

Date of Publication (20): 1983

Volume ID (22):

Location in Work (25): 174-175

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A story of encounter with a snow leopard that got into a cowshed was described in a popular form.

Keywords (45): Snow leopard/ attack/ caw.

:

Reference Type:

Author, Analytic (01): Krasilnikov N.

Title, Analytic (04): Nature reserve.

Journal Title (10): The motley days.

Date of Publication (20): 1988

Volume ID (22):

Location in Work (25): 174-176

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes a story of a visit to the Chatkal nature reserve, of encounters with fox, chukars, ibex, eagles, and snow leopard.

Keywords (45): Uzbekistan/ Chatkal nature reserve/ ibex/ snow leopard.

Reference Type:

Author, Analytic (01): Kreuzberg-Mukhina E.A., Bykova E.A., Esipov A.V.

Title, Analytic (04): The Endangered species and Snow Leopard Conservation problems. Schoolbook.

SC

Journal Title (10):

Date of Publication (20): 2001

Volume ID (22):

Location in Work (25): 27

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The manual contains the information on snow leopard – species listed in Red Data book of Uzbekistan. The data on its biology, distribution and number in republic and within the world is given. Snow leopard

conservation problems are considered.

Keywords (45): Uzbekistan/ biology/ distribution/ number/ conservation problems/

snow leopard.

Reference Type:

Author, Analytic (01): Krever V., Pereladova O., Williams M., Jungius H.

Title, Analytic (04): Ecosystems of the High Mountains Species of Special Interest in

Uzbekistan.

Journal Title (10): Biodiversity Conservation in Central Asia. An Analysis of Biodiversity

and Current Threats and Initial Investment Portfolio.

Date of Publication (20): 1998

Volume ID (22):

Location in Work (25): 55-59, 98.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It gives description complexes of mountain ecosystems fauna of Central Asia, endangered vertebrates, main threats to biodiversity and existing protected areas network. Among the rare animal species of the alpine and subalpine meadows first of all should be listed the West Tien Shan endemic, the Menzbier's marmot (*Marmota menzbien*); the markhor wild goat which still inhabits the Vakhsh range in Tadjikistan; the dhole (*Cyon alpinus*) which is practically extinct; the Tien Shan bear (*Ursus arctos isabellinus*), and the snow leopard (*Uncia uncia*); among birds, the wlute-chested dove (*Columba leuconota*), sandgrouse (Syrrhaptes tibetanus, snowcocks (*Tetraogallus tibetanus*, *T.altaicus*) and bearded vulture (*Gypaetus barbatus*).

Keywords (45): Central Asia/ mountain ecosystem/ fauna/ vertebrates/ endangered species/ threats/ protected areas network/ snow leopard.

Reference Type:

Author, Analytic (01): Kuzminykh I. A.

Title, Analytic (04): Reproduction of snow leopards in captivity.

Journal Title (10): Rare mammal species of the USSR and their protection. Proceedings of

the Third all-Union meeting.

Date of Publication (20): 1983

Volume ID (22):

Location in Work (25): 116-118

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Information concerning keeping, reproduction, and having young

generations of snow leopards in the Moscow Zoo.

Keywords (45): Russia/ Moscow Zoo/snow leopard/ captivity/ selection/ reproduction.

Reference Type:

Author, Analytic (01): Kuznetzov B.A.

Title, Analytic (04): Felidae.

Journal Title (10): Mammals of Kazakhstan.

Date of Publication (20): 1948

Volume ID (22): Vol.13 (XXVIII)

Location in Work (25): 88-89

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The snow leopard widely wide distributed in mountains of Middle and Central Asia. Irbis meets in Altai, Saur, Tarbagatai, Jungarian and Zaili Ala Tau, Kirghiz ridge and Talass within the Kazakhstan. The snow leopard is very rare in Southern Altai, and probably it stay here occasionally.

Keywords (45): Kazakhstan distribution snow leopard.

Reference Type:

Author, Analytic (01): Kuznetzov B.A.

Title, Analytic (04): The cat family. The province of Central Asia mountains. The West

Tien Shan area.

Journal Title (10): Animals of Kyrgyzstan.

Date of Publication (20): 1948

Volume ID (22):

Location in Work (25): 92-97, 122-172.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides description of geographical distribution, habitats, behavior, and food of the cat family species in Kyrgyzstan (tiger, snow leopard, lynx, manul). It also provides zoogeographical description of Kyrgyzstan (zoogeographical zoning, landscape, fauna complexes), and zoning of Central Asia's mountainous areas. Snow leopard is met in the East Tien Shan, West Tien Shan, East Pamir, and Tajikistan mountainous areas. In Kyrgyzstan, snow leopard is distributed in highlands of the Talas Ala-Tau. Terskey Ala-Tau, Kyrgyz, Fergana, Alai and Zaalai ridges.

Keywords (45): Kyrgyzstan/ distribution/ snow leopard.

Reference Type:

Author, Analytic (01): Kuznetsov B. A.

Title, Analytic (04): The mountainous province in Central Asia.

Journal Title (10): Essay on geographical zoning in the USSR.

Date of Publication (20): 1950

Volume ID (22): Edition 20th. (XXXV). New series. Zoological section.

Location in Work (25): 141-144, 148-155

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The landscape and biologic diversity of Central Asia's mountains are described. Different types of fauna complexes are segregated. Snow leopard, dhole, and ibex are referred to Central Asia's highland species.

Keywords (45): Central Asia/ landscapes/ biodiversity/ mountain zone/ fauna/ snow leopard.

Reference Type:

Author, Analytic (01): Kuznetzov B.A.

Title, Analytic (04): Materials on mammal fauna in Central Asia. Central Asian

mountainous province.

Journal Title (10): Biology, biogeography, and taxonomy of mammals in the USSR.

Proceeding of MOIP.

Date of Publication (20): 1963

Volume ID (22):

Location in Work (25): 116-121, 141-143

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides a list of mammals of Central Asia (species and sub-species) indicating their main habitats, and undertakes an attempt to zone fauna

of Central Asia based on data collected by the world science community concerning distribution of various mammal species over the country. Snow leopard *Uncia uncia* Schr. was indicated to inhabit

the mountains of Central Asia.

Keywords (45): Central Asia/ mountains/ fauna/ snow leopard/ distribution.

Reference Type:

Author, Analytic (01): Kuznetsov B. A.

Title, Analytic (04): The cats - Felidae.

Journal Title (10): Guide of vertebrate species of USSR. Mammals.

Date of Publication (20): 1975

Volume ID (22): Part 3.

Location in Work (25): 161, 164-165

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): An identification table for genus and species of Felidae family of USSR is given. Snow leopard *Panthera uncia* (Schreher) described

for Pamir, Tien Shan, Altai and mountains of Tuva.

Keywords (45): USSR/ Felidae/ taxonomy/ distribution/ snow leopard.

Reference Type:

Author, Analytic (01): Kydyraliev A. K.

Title, Analytic (04): Some animal species' habitat alteration in the Central Tien Shan.

Journal Title (10): Influence of anthropogenic factors on the formation of zoogeographic complexes. The fifth inter-school zoogeographic conference.

Date of Publication (20): 1970.

Volume ID (22): Part 1.

Location in Work (25): 46-48

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Irrigation and drainage activity in Tien Shan led some bird species to disappear. Number of species to build their nests in tree holes has dropped. Mongolian sandpiper and black-bellied sand grouse disappeared in the steppe areas. Great bustard, formerly nesting in this area, can now be rarely seen only in migration. The direct anthropogenic influence resulted in shrinkage of game animal and bird populations such as moral, goitered gazelle, argali, snow leopard, and stone marten.

Keywords (45): Kyrgyzstan/ Tien Shan/ human influence/ water conservation activity/ decline/ range/ number/ birds/ mammals/ game species/ moral/ argali/ snow leopard.

Reference Type:

Author, Analytic (01): Laptev M. K.

Title, Analytic (04): The cats - Felidae.

Journal Title (10): Central Asia mammals Guide (insectivorous, bats, predators, and

ungulates).

Date of Publication (20): 1929

Volume ID (22): Issue I.

Location in Work (25): 55-60

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes identification features of the Felidae family species (Otocolobus, Acinonyx, Lynx, Tigris, Pardus, Uncia, Eremaelurus, Caeacal, Catolynx, Felis): colour, body size and skull length, length of limbs, presence or absence of ear-brushes, cheek-bones width, nasal bones, palatine bone, rapacious tooth, and acoustical capsules.

Keywords (45): Central Asia/ Felidae/ snow leopard/ taxonomy/ distribution.

Reference Type:

Author, Analytic (01): Laptev M. K.

Title, Analytic (04): The cats - Felidae.

Journal Title (10): Guide of vertebrate species of Turkmen SSR. Mammals.

Date of Publication (20): 1936

Volume ID (22): Issue V.

Location in Work (25): 77-82

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): An identification table for genus and species of Felidae family of Turkmenistan is given. The following features are used: colour, pattern, teeth formula, skull measurements, and sizes of body, head, and tail. The presence of snow leopard for Kopet-Dag is indicated.

Keywords (45): Turkmenistan/ Kopet-Dag/ Felidae/ taxonomy/ snow leopard.

Reference Type:

Author, Analytic (01): Lavrov N. P.

Title, Analytic (04): Snow leopard, or irbis.

Journal Title (10): Red Data Book of the RSFSR.

Date of Publication (20): 1985

Volume ID (22):

Location in Work (25): 58-60

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard *Uncia uncia* Scheber, 1775, has status I, that is rare, non-numerous and endangered species. Information about its distribution, habitats, biology, number, existing and required conservation measures in the RSFSR and USSR is provided. Total population in the USSR is 800 – 1,000 animals.

Keywords (45): USSR/ Russia/ Red Data book/ snow leopard/ status/ distribution/ number/life history characteristics / conservation measures.

Reference Type:

Author, Analytic (01): Lesnyak A. P., Ishunin G. I., Yesipov A. V., Alimov L. A.

Title, Analytic (04): Cats in Uzbekistan's fur trade.

Journal Title (10): Hunting and nature protection in Uzbekistan.

Date of Publication (20): 1984

Volume ID (22):

Location in Work (25): 57-64

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Data of distribution, food, and fur trade of Felidae (North Persian leopard, snow leopard, caracal, Turkestan lynx, manul, Turkestan steppe cat, jungle cat [chaus], sand cat) in Uzbekistan is given. Snow leopard is an object of illegal hunting.

Keywords (45): Uzbekistan/ rare species/ cats/ species range/ diet/ hunting/ pelts/ poaching/ snow leopard.

Reference Type:

Author, Analytic (01): Loginov O.

Title, Analytic (04): Status and Conservation of Snow Leopard in Kazakhstan.

Journal Title (10): Proceedings of 8th International Snow Leopard Symposium – Islamabad.

Date of Publication (20): 1995

Volume ID (22):

Location in Work (25): 39-41

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopards are to be found in the most extreme eastern, southeastern and southern mountainous regions, including the Altai. Saur, Tarbagatai. Dzhungarian, Alatau, Northern and Western Tian-Shan ranges. The snow leopard or irbis is the most rare in eastern Kazakstan in the ranges of Katunskie Belki, South Altai, Kurchumski, Sarymsakty, Saur and Tarbagatai. Total snow leopard population in Kazakstan is estimated at no more than 100-110 animals, including 20-25 in the central part of the Zailisky-Alatau. Although there are nine protected areas in Kazakstan, snow leopards are only regularly reported from the Aksu-Dzhabagly and Almaty reserves and occasionally in Markakolsky Reserve. The major threats to the species include: Deliberate poaching with the aim of selling the valuable fur of the snow leopard; habitat loss resulting from the expansion of human activity in its mountain habitat, and deliberate or retaliatory killing by shepherds in response to predation upon livestock.

Keywords (45): Kazakhstan/number/ distribution/ threats/ protected areas/ conservation activity/ snow leopard.

Reference Type:

Author, Analytic (01): Lukarevskiy V. S.

Title, Analytic (04): Peculiarities of communicative behavior of leopard, irbis, lynx, and

Journal Title (10): Mammals of Russia and neighbouring countries. Proceedings of the

conference.

Date of Publication (20): 2003

Volume ID (22):

Location in Work (25): 200

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It gives the description of communicative behavioral system (visual, olfactory and vocal elements) for two groups of large Felidae species

such as leopard-irbis and lynx-caracal. General and specific behavioral

regularities are given.

Keywords (45): Felidae/ communicative behavioral/ leopard/ snow leopard/ lynx/

caracal.

Reference Type:

Author, Analytic (01): Marma B.B. and Yunchis V.V.

Title, Analytic (04): A contribution to biology of the Snow-leopard (Panthera uncia uncia)

(by observations in captivity)

Journal Title (10): Zoological journal

Date of Publication (20): 1968

Volume ID (22): XLVII, issue 11.

Location in Work (25): 1689-1694

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The methods to obtain the progeny of the snow leopard (*Panthera uncia uncia*) in captivity were being elaborated in the zoological garden of Kaunas, Lithuanian SSR. The blood characteristics for snow leopards is given and compared to that for African lions and Sumatrian tigers. A series of internal, external and clinical indices is established. The rat lasts for 5-7 day, the duration of pregnancy equals 98 days. The duration of lactation varies from 3 to 4 months. Sexual maturity is attained on the 3rd-4th year. From 1960 to 1967 in zoological garden of the world about 29 snow leopards were born, 14 of them – in the Kaunas zoological garden.

Keywords (45): Lithuania/ Kaunas zoological garden/ breeding/ blood characteristics/ physiological characteristics/ captivity / duration of pregnancy/ birth/ cubs/ feeding/ snow leopard.

Reference Type:

Author, Analytic (01): Matyushkin E. N.

Title, Analytic (04): Snow leopard, or irbis *Uncia uncia* Scheber, 1775.

Journal Title (10): Red data Book of the USSR. Rare and endangered animal and plant species.

Date of Publication (20): 1984

Volume ID (22): Vol.1.

Location in Work (25): 42-43

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard Uncia uncia Scheber, 1775, was included in the Red Data Book of the USSR and given status III – rare species with small habitat. It provides information about its distribution (from Pamir and West Tien Shan to East Sayans), habitat, biology, number, threats, and existing and required protection measures. Total number in the USSR is about 2,000 animals. There were 194 snow leopards in the zoos throughout the world at the beginning of 1980. In the USSR the species is under protection in nature reserves as follows: Ramit, Chatkal, Besh Aral, Aksu Jabagly, Sary Chelek, Almaty, Altai.

Keywords (45): USSR/Red Data book/ snow leopard/ status/ distribution/ number/life history characteristics / conservation measures.

Reference Type:

Author, Analytic (01): Medvedev D.G.

Title, Analytic (04): Distribution and migration of the snow leopard in Baikal region.

Journal Title (10): Mammals of the Russia and neighbouring countries. Proceedings of the conference.

Date of Publication (20): 2003

Volume ID (22):

Location in Work (25): 218

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provided description of snow leopard distribution in Eastern Sayan, South Transbaikalia and mountains of Baikal lake as well as its migratory ways within the region.

Keywords (45): Russia/ Baikal region/ distribution/ migration/ snow leopard.

Reference Type:

Author, Analytic (01): Meklenburtsev R. N.

Title, Analytic (04): About ecology of ibex in Pamir.

Journal Title (10): Zoological journal.

Date of Publication (20): 1949

Volume ID (22): Vol. 28, edition 5.

Location in Work (25): 482-483

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Ibex is distributed all over the Pamir mountains, inhabiting rocks and canyons and ascending up to 5,500 m above sea level. In summer, ibex mostly feeds upon sedge and cereals, in winter –wormwood. It keeps in herds containing 15 to 30 animals. The coupling period is December; kids being born at the beginning of June. The most dangerous predators are snow leopard and wolf. Ibex is a main commercial game species.

Keywords (45): Tajikistan/ pamir/ ibex/ distribution/ number/ diet/ reproductive biology/ predators/ snow leopard/ commercial use.

Reference Type:

Author, Analytic (01): Mitropolskiy O. V.

Title, Analytic (04): The Red Book of the USSR (Rare and endangered bird and animal

species in Uzbekistan).

Journal Title (10): Hunter and fisherman of Uzbekistan.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 28-48

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard is distributed in the Ugam, Pskem, Chatkal, Fergana,

Alai, Turkistan, and Hissar ridges. Though there is no precise data concerning number of snow leopard in Uzbekistan it is estimated to

range from 15-20 to 50 animals.

Keywords (45): Uzbekistan/ snow leopard/ distribution/ number.

Reference Type:

Author, Analytic (01): Mitropolskiy O. V.

Title, Analytic (04): Biodiversity of mammals in Uzbekistan: results of the studies;

conservation, use and monitoring projects.

Journal Title (10): Information bulletin/digest of Central Asia transboundary biodiversity

project.

Date of Publication (20): 2004

Volume ID (22): N 8.

Location in Work (25): 18-25

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The article reviews conservation projects regarding valuable species of the West Tien Shan such as snow leopard, Tien Shan brown bear, Tien

Shan and Karatau argali, Menzbier's marmot. The questioning revealed three cases of poaching snow leopard in the West Tien Shan in Kazakhstan, and 11 – in Uzbekistan. A necessity to severely suppress any acts of poaching or skin trade is emphasized. A number of

measures is suggested to preserve the species.

Keywords (45): Western Tien Shan/ rare species/ status/ threats/ conservation

measures/ snow leopard/ brown bear/ Tien Shan argali/ Karatau argali/

Menzbier's marmot.

Reference Type:

Author, Analytic (01):

Title, Analytic (04): Miraki Reservation, Chatkal Reservation.

Journal Title (10): Uzbekistan's Reservations and Natural Monuments. XIV General Assembly of the International Union for Conservation of Nature and Natural Resources.

Date of Publication (20): 1978

Volume ID (22):

Location in Work (25): 9-11

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes history of the Miraki and Chatkal nature reserves' establishment and provides data concerning area, landscapes, altitude zoning, flora and fauna as well as natural monuments.

Keywords (45): Uzbekistan/ Chatkal nature reserve/ Miraki nature reserve/ landscapes/ flora/ fauna/ natural monuments/ snow leopard.

Reference Type:

Author, Analytic (01): Moiseev V.A.

Title, Analytic (04): Mountain nature.

Journal Title (10): Nature of Middle Asia in objective.

Date of Publication (20): 1988

Volume ID (22):

Location in Work (25): 86

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The snow leopard inhabits the upper belt of the Tien Shan, Hissar Alai and Pamir mountains. More often it hunts for wild ibexes. Irbis avoids meeting a man, and even wounded it rarely attacks him. At the beginning of spring a snow leopard gives birth to two-five cubs. It lives up to 21 years. The snow leopard is registered in the Red Data Book of USSR and IUCN Red List.

Keywords (45): Uzbekistan/ distribution/ habitats/ preys/ Red data book/ snow leopard.

Reference Type:

Author, Analytic (01): Moiseev V.A., Kashkarov D.Yu.

Title, Analytic (04): Snow leopard.

Journal Title (10): Animals of Uzbekistan.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 137-138

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard inhabits in zones of alpine meadows and juniper forests. Main preys are ibexes and wild sheep. Irbis included in Red Data book

fam preys are rockes and wha sheep. Itois included t

of USSR.

Keywords (45): Uzbekistan/ distribution/ habitats/ preys/ Red data book/ snow leopard.

Reference Type:

Author, Analytic (01): Moiseev V.

Title, Analytic (04): Around Tien Shan and Hissaro-Alai.

Journal Title (10): Alone with nature.

Date of Publication (20): 1993

Volume ID (22):

Location in Work (25): 7-14

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A visit to a nature reserve, where the author met protected animals, is described in a popular form. It describes the encounters with wild boar, griffon vulture, brown bear, Menzbier's marmot, Tien Shan souslik, golden eagle, snow leopard, and Siberian ibex.

Keywords (45): Uzbekistan/ Chatkal nature reserve/ rare species/ game species/ brown bear/ Menzbier's marmot/ golden eagle/ wild ibex/ wild boar/ snow leopard.

Reference Type:

Author, Analytic (01): Molyukov M. I., Rossolimo O. L.

Title, Analytic (04): Irbis.

Journal Title (10): Animals of the Red Data Book of the USSR.

Date of Publication (20): 1989

Volume ID (22):

Location in Work (25): 74-81

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In a popular form it tells about snow leopard, its geographical distribution, behavioral patterns, food, enemies and competitors, hunting behavior, etc. Given are interesting data concerning the number of ibex killed during one hunt in eastern Pamir (25 - 30 ibexes), cases of snow leopard's attacking bears and so on. Snow leopard rarely preys on livestock, mainly sheep and goats. Young snow leopards are easily tamed. There are about 2,000 snow leopards in the USSR about 1,500 of them are in Kyrgyzstan.

Keywords (45): USSR/ snow leopard/ distribution/ number/ diet/ behavior.

Reference Type:

Author, Analytic (01): Naumov S.P.

Title, Analytic (04): The cats - Felidae.

Journal Title (10): Zoology of vertebrates.

Date of Publication (20): 1950

Volume ID (22):

Location in Work (25): 315

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Description of Felidae family species (*Tigris tigris, Unci uncia, Felis silvestris, Felis ocreata, Felis euptilura, Lynx lynx, Actonyx jubatus*) is given. Snow leopard inhabited in mountain ridges of

Middle and Central Asia.

Keywords (45): USSR/ Felidae/ taxonomy/ distribution/ snow leopard.

Reference Type:

Author, Analytic (01): Naumov S.P.

Title, Analytic (04): The cats - Felidae.

Journal Title (10): Zoology of vertebrates.

Date of Publication (20): 1973

Volume ID (22):

Location in Work (25): 330

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Description of Felidae family species (*Tigris tigris, Panthera pardus, Unci uncia, Felis silvestris, Felis ocreata, Felis euptilura, Lynx lynx, Actonyx jubatus*) is given. Snow leopard inhabited in

mountain ridges of Middle and Central Asia.

Keywords (45): USSR/ Felidae/ taxonomy/ distribution/ snow leopard.

Reference Type:

Author, Analytic (01): Naumov S.P., Lavrov N.P.

Title, Analytic (04): The cats - Felidae. Mountain regions of USSR.

Journal Title (10): Biology of game animals and birds of USSR.

Date of Publication (20): 1948

Volume ID (22):

Location in Work (25): 59-61,351-355

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Description of Felidae family species (*Tigris tigris, Leopardus (Pardus) pardus* and *Unci uncia*) is given. In USSR snow leopard

inhabited in mountain ridges of Middle Asia and Altai.

Keywords (45): USSR/ Felidae/ taxonomy/ distribution/ snow leopard.

Reference Type:

Author, Analytic (01): Nikolaevskiy A. G.

Title, Analytic (04): The Kyrgyz state nature park "Ala-Archa". People's park of the Uzbek SSR.

Journal Title (10): National parks.

Date of Publication (20): 1985

Volume ID (22):

Location in Work (25): 89-92

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides general information about the Kyrgyz state nature park «Ala-Archa", its physico-geographical features, relief, landscape zoning, and description of flora and fauna. Snow leopard, Tien-Shan brown bear, ibex (more than 300 animals), porcupine, stone marten, ermine, and marmot, etc. are mentioned as the most interesting

animals.

Keywords (45): Kyrgyzsatn/ Ala-Archa national park/ location/ climate/ soils/ relief/ plants/ animals/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Novikov G. A.

Title, Analytic (04): Sub-genus UNCIA Gray

Journal Title (10): Predatory mammals of the USSR fauna.

Date of Publication (20): 1956

Volume ID (22):

Location in Work (25): 274-277

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Identification features of the sub-genus Uncia (colour; length of body and tail; shoulder height, and skull measurements) are given. Distribution, habitat, way of life, reproduction biology, behavioural patterns, migration routes, commercial value of snow leopard in the

USSR is described.

Keywords (45): USSR/ Central Asia/ Uncia/ snow leopard/ taxonomy/ distribution/ habitats/ highly mountain/ reproduction/ migration/ use.

Reference Type:

Author, Analytic (01): Novikov L.K., Khalmukhamedov K.S.

Title, Analytic (04): Mammals.

Journal Title (10): Protected areas of Uzbekistan.

Date of Publication (20): 1972

Volume ID (22):

Location in Work (25): 20-24, 52

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): History of establishment of the nature reserves in Uzbekistan, climate, flora and fauna are described. Status of mammals in Chatkal nature reserve is described. Here inhabited marten, weasel, ermine,

badger, brown bear, wild ibex and snow leopard.

Keywords (45): Uzbekistan/ protected areas/ Chatkal nature reserve/ mammals/ snow

leopard.

Reference Type:

Author, Analytic (01): Ochilov A.M.

Title, Analytic (04): Protected areas of Kashkadarya province.

Journal Title (10): Geographical problems of protected areas development.

Date of Publication (20): 1986

Volume ID (22):

Location in Work (25): 164-166

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The 30 mammals, 180 birds, 9 reptiles and 1 fish are presented in Hissar nature reserve, Uzbekistan. Snow leopard, Turkestan lynx, brown bear, otter, golden eagle and Himalayan griffon included in IUCN Red data Book. Number of ibex was declined.

Keywords (45): Uzbekistan/ Hissar nature reserve/ mammals/ endangered species/ snow leopard.

Reference Type:

Author, Analytic (01): Ognev S. I.

Title, Analytic (04): Uncia uncia Sch., 1778. Irbis or snow leopard.

Journal Title (10): Animals of the USSR and neighboring countries.

Date of Publication (20): 1935

Volume ID (22): Vol.3.

Location in Work (25): 263-270

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes identification signs and taxonomy of genus Uncia Gray and the only representative of genus Uncia uncia Sch., 1778, distribution and some features of the species' biology. A habitat of snow leopard includes the mountains of Central Asia from Kopet-Dag and northern Iran to the east along the mountain systems of Pamir, Turkestan, Gilgit, Tibet, Himalayas before the country Kam. On the north, snow leopard is met in Tarbagatai, Altai, Sayans, and further eastward to the Yablonoviy and Stanovoy ridges reaching the confluence of the Shilka and Argun rivers.

Keywords (45): USSR/ snow leopard/ taxonomy/ biology/ distribution.

Reference Type:

Author, Analytic (01): Ognev S. I.

Title, Analytic (04): The cats (Felidae).

Journal Title (10): Ecology of mammals.

Date of Publication (20): 1951

Volume ID (22):

Location in Work (25): 23-33

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A list of mammals of the USSR fauna by orders is presented. Data of distribution and ecology mainly concerns the species of commercial value. From this viewpoint the Felidae species such as tiger, leopard, snow leopard, and lynx are referred to a category of accidentally hunted species of low commercial value.

Keywords (45): USSR/ fauna/ mammals/ cats/ game species/ accidentally hunted species/ snow leopard.

Reference Type:

Author, Analytic (01): Oruntaeva K. B.

Title, Analytic (04): The Zailiyskiy natural national park.

Journal Title (10): New nature reserves of Kazakhstan.

Date of Publication (20): 1988

Volume ID (22):

Location in Work (25): 71-86

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The Zailiyskiy state natural national park is suggested to establish in the center of northern micro slope of Zailiyskiy Alatau. There are 42 mammal, 138 bird, tow amphibian, and eight reptile and fish species, and 145 daylight butterfly species in the Zailiyskiy Alatay. Of them, seven mammal species such as argali, Tien Shan bear, snow leopard, Turkistan lynx, stone marten, Central Asian otter, and Indian porcupine are included in the Red Data Books of Kazakhstan and USSR.

Keywords (45): Kazakhstan/ Zaaliyskiy national park/ establishment/ fauna/ endangered species/ snow leopard.

Reference Type:

Author, Analytic (01): Oshmarin P. G., Pikunov D. G.

Title, Analytic (04): Traces in nature.

Journal Title (10):

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 296

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Traces of vital activity of various animal species such as footprints, faeces, food remains, etc. are identified. It also provides information about hunting behavior of predators. Snow leopards would hunt along rather than in groups. Near the remains of prey they leave pieces of skin, skull of victim remaining untouched.

Keywords (45): Traces of vital activity/ hunting behavior/ snow leopard.

Reference Type:

Author, Analytic (01): Pavlinov I. Ya., Rossolimo O. L.

Title, Analytic (04): Taxonomy of mammals in the USSR.

Journal Title (10):

Date of Publication (20): 1987

Volume ID (22):

Location in Work (25): 90

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The reference book on taxonomy of modern mammals in the USSR provides classification from order to species, list of synonyms for all taxons, and indicates types and typical habitats, and places of storage of typical exhibits. Fauna of the USSR has one species of genus *Uncia*

Grey, 1854 – Uncia uncia (Schreber, 1776).

Keywords (45): USSR/ taxonomy/ snow leopard.

Reference Type:

Author, Analytic (01): Pavlinov I. Ya., Borisenko A. V., Kruskop S. V., Yahontov Ye. L.

Title, Analytic (04): Mammals of Eurasia. II. Non-Rodentia: Taxonomic and geographic

reference book.

Journal Title (10):

Date of Publication (20): 1995

Volume ID (22):

Location in Work (25): 167-168

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): This reference book provides a detailed epi-species classification of terrain mammal orders other than rodents. Identification keys for taxons, information about geographical distribution, synonyms, and comments on taxonomy are given. Genus *Uncia* Gray, 1854 includes one species *Uncia uncia* (Schreber, 1776), distributed in highlands of Central Asia (Tibet, Pamir, Tien-Shan, Altai). Synonyms: *irbis* Ehrenberg, 1830; *uncioides* Horsfield, 1855; *schneideri* Zukovsky, 1950.

Keywords (45): USSR/ taxonomy/ synonyms/ distribution/ snow leopard.

Reference Type:

Author, Analytic (01): Pavlinov I. Ya., Rossolimo O. L.

Title, Analytic (04): Taxonomy of mammals in the USSR: additions.

Journal Title (10):

Date of Publication (20): 1998

Volume ID (22):

Location in Work (25): 90

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A full hierarchic system of mammal fauna in the USSR and CIS countries, list of synonyms, comments on taxonomy, and information about geographical distribution are given. Genus *Uncia* Gray, 1854 includes one species *U. uncia* (Schreber, 1776) distributed in highlands (up to 5,000 m) of Central Asia (Tibet, Pamir, Tien-Shan, Altai).

Synonyms: irbis.

Keywords (45): USSR/ taxonomy/ synonyms/ distribution/ snow leopard.

Reference Type:

Author, Analytic (01): Pavlinov I. Ya., Kruskop S. V., Varshavskiy A. A., Borisenko A. V.

Title, Analytic (04): Genus irbis (*Uncia* Gray, 1854), irbis (*Uncia uncia* Schreber, 1776).

Terrain animals of Russia. Reference book – identifier.

Journal Title (10):

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 118-119

Location/URL (38)

Notes (42): Full text available ...

Abstract (43): It provides brief characteristics of terrain mammals in Russia: taxonomy, synonyms, principle features, distribution, habitat, biological features. Snow leopard is distributed in the mountains (from 800 to 5,000 m above sea level) of Central Asia - Himalayas, Tibet, Pamir, Tien-Shan; in Russia – the Altai, Tuva, southern Transbaikalia.

Keywords (45): USSR/ taxonomy/ distribution/ snow leopard.

Reference Type:

Author, Analytic (01): Persianova L. A.

Title, Analytic (04): About the Red Book listing rare and endangered animal and plant species

Journal Title (10): Urgent problems of nature protection and sustainable use of natural resources. Proceedings of the second national conference of Uzbekistan.

Date of Publication (20): 1980

Volume ID (22):

Location in Work (25): 41-42

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The Red Book includes data of rare and endangered fauna and flora species. The species are sub-divided into five categories by threat. Volume 1 of the Red Book of the Uzbek SSR includes 22 mammal species, 31 bird species, five reptile and five fish species. Among them there are endemic species and species included in the International Red list. Snow leopard is referred to a category of endangered species.

Keywords (45): Uzbekistan/ Red Data book/ flora/ fauna/ rare species/ categories of threat/ mammals/ birds/ reptiles/ fishes/ snow leopard.

Reference Type:

Author, Analytic (01): Persianova L. A.

Title, Analytic (04): Snow leopard, or irbis *Uncia uncia* Scheber, 1775.

Journal Title (10): Red Data Book of the Uzbek SSR.

Date of Publication (20): 1983

Volume ID (22): Vol. 1.

Location in Work (25): 32-33

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Status of snow leopard in Uzbek Red Data Book is rare species with reducing population. It provides data concerning distribution, habitats, biology, threats, and existing and required snow leopard protection measures in Uzbekistan. This species is distributed in the Kurama, Chatkal, Pskem, Ugam, Turkistan, and Gissar ridges. Its population is about 10 animals. There are two snow leopards in the Tashkent zoo. This species is protected in Zaamin, Kizilsu, Miraka, and Chatkal nature reserves.

Keywords (45): Uzbekistan/ Red data book/ endangered species/ snow leopard/ status of threat/ distribution/ habitats/ number/ life-history/ threats/ conservation measures.

Reference Type:

Author, Analytic (01): Petrov B. M.

Title, Analytic (04): Game fauna in western extremities of the Tien Shan and specific

issues of its enrichment and use.

Journal Title (10): Zoogeography of land. Proceedings of third all-Union meeting.

Date of Publication (20): 1963

Volume ID (22):

Location in Work (25): 224-225

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides a brief description of game fauna in the West Tien Shan including the Ugam, Pskem, Chatkal, and Kurama ridges, characterized by high diversity and practical value of predatory mammal species (including snow leopard), Artiodactyls, rodents and birds. There arises a question of game fauna enrichment and game management regulating on this territory.

Keywords (45): Uzbekistan/ Western Tien Shan/ game species/ hunting farm/ birds/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Plakhov K. N.

Title, Analytic (04): Menzbier's marmot in Kazakhstan.

Journal Title (10): Zoological studies in Kazakhstan.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 106-109

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Menzbier's marmot is preyed on by snow leopard, bear, wolf, fox, bearded vulture, golden eagle, black vulture, and raven. A harm caused by the predators to the Kazakhstan population of marmot made up

2,000 - 3,000 in 2001.

Keywords (45): Kazakhstan/ Menzbier's marmot/ predators/ snow leopard.

Reference Type:

Author, Analytic (01) Plyaskin V.E.

Title, Analytic (04): Rare Felidae species in the Chatkal valley of the West Tien Shan.

Journal Title (10): Protection and reproduction of fauna.

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 41-42

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In 1981, rare Felidae species such as snow leopard, Turkistan lynx, and manul (one encounter recorded) were found in the Besh-Aral nature reserve (the Chatkal valley). Illegal hunting and high concentration of people in some places is emphasized to impact the animal populations.

Keywords (45): Kyrgyzstan/ Besh-Aral nature reserve/ cats/ snow leopard/ lynx/ manul/ species range/ diet/ decline/ illegal hunting.

Reference Type:

Author, Analytic (01): Plyaskin V. E.

Title, Analytic (04): About a methodology of predatory mammals study under the

conditions of mountain nature reserves.

Journal Title (10): Study and protection of wildlife objects.

Date of Publication (20): 1984

Volume ID (22):

Location in Work (25): 25

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Methods of studying large predatory mammals in mountain nature reserves are described. The following was recommended in terms of snow leopard: methods of plotting encounter places based on oral questioning of local communities; counts on the sites of traces (1.5 x 1.5 m) with mellow flat soil with odor lure in the center; obtaining indirect data by analyzing data concerning numbers and herds of ibex.

Keywords (45): Large predators/ methodology of studing/ snow leopard.

Reference Type:

Author, Analytic (01) Pokrovskiy V. S.

Title, Analytic (04): Mammals.

Journal Title (10): Rare and endangered mammal and bird species in the USSR.

Date of Publication (20): 1969

Volume ID (22):

Location in Work (25): 19-28

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The work presents a preliminary list of rare and endangered predatory and ungulate species. Snow leopard inhabits the mountain ridges of Tajikistan and Kyrgyzstan, and sometimes is met in the Altai and Tuva. Despite its habitat has not changed since recently, number of snow leopard is decreasing. Snow leopard population is reducing because this species is believed to be dangerous, as its skin is of high and sustainable demand, and because of high prices zoos will readily pay to buy snow leopards. Shepherds, local hunters and geologists hunt snow leopard.

Keywords (45): USSR/ endangered species/ snow leopard/ distribution/ number/ use/ protection.

Reference Type:

Author, Analytic (01): Pokrovskiy V. S.

Title, Analytic (04): Snow leopard, or irbis.

Journal Title (10): Large mammals.

Date of Publication (20): 1976

Volume ID (22):

Location in Work (25): 82-98

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It considers biology of snow leopard, provides data concerning its number and distribution, and shows environment correlation of the predator. Besides, it describes the ways of catching snow leopards, and conditions under which it can be kept in enclosures. Precise

recommendations for the species protection are given.

Keywords (45): USSR/ snow leopard/ distribution/ number/ use/ protection.

Reference Type:

Author, Analytic (01): Pokrovskiy V. S.

Title, Analytic (04): The role of zoos in conservation of rare predator mammal species.

Journal Title (10): Ecologic fundamentals of protection and sustainable use of predatory

mammals.

Date of Publication (20): 1979

Volume ID (22)

Location in Work (25): 54-56

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopards are kept in 50 zoos worldwide, where some 70 animals

were born. There are 26 snow leopards in 28 zoos of the USSR. The

zoos of Chicago and Kaunas are specialized in breeding snow leopards.

Keywords (45): Snow leopard/ captive breeding/ Zoo.

Reference Type:

Author, Analytic (01): Pokrovsky V.S., Rukovsky N.N.

Title, Analytic (04): Special protected areas (zakazniks) in areas of existence of rare and

especially useful species of animals.

Journal Title (10): Remarkable natural landscapes of the USSR and their protection.

Date of Publication (20): 1967

Volume ID (22)

Location in Work (25): 132-135

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The description of nature reserves of USSR is given. The key species

living within these reserves are specified. The snow leopard is recorded

for zakaznik located in Koksu River upper, Kazakhstan.

Keywords (45): USSR/ protected areas/ snow leopard.

Reference Type:

Author, Analytic (01): Potapov R.

Title, Analytic (04): On the top of ridges.

Journal Title (10): Tiger gully. Unknown world.

Date of Publication (20): 1986

Volume ID (22):

Location in Work (25): 146-162

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In a popular form, it says about wildlife of Pamir, unique animal kingdom of highlands. The author describes his personal encounter with snow leopard following a herd of ibex and thinks of peculiarities

of this large predator and reasons for hunting it.

Keywords (45): Tajikistan/ Pamir/ animals/ snow leopard/ ibex.

Reference Type:

Author, Analytic (01): Poyarkov A. D., Lukarevskiy V. S.

Title, Analytic (04): Irbis in south-western Tuva.

Journal Title (10): 4th Congress of mammalogy society.

Date of Publication (20): 1999

Volume ID (22):

Location in Work (25): 204

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In 1998, under the WWF Altai-Sayans ecoregion conservation program, traces of snow leopard were detected in the ridges of Tsaran-Shibetu and Shipshal. The density of vital activity traces is comparable with those in northern Mongolia.

Keywords (45): Russia/ Altai-Sayans/ snow leopard/ distribution/ number.

Reference Type:

Author, Analytic (01): **Prokopov K. P.**

Title, Analytic (04): Taxonomic list of mammal fauna of eastern Kazakhstan.

Journal Title (10): Proceedings of V Congress mammalogy' society of the Academy of

Science of the USSR.

Date of Publication (20): 1990

Volume ID (22): Vol. I.

Location in Work (25): 92-93

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): During the period 1965 through 1988, studies were conducted in the

north-east of Kazakhstan (Kazakhstan's Altai, Zaisan depression, Saur-

Tarbagatai) and list of mammals (104 species) for the area made.

Keywords (45): Kazakhstan/ Altai/ Zaisan valley/ Saur-Tarbagatai/ mammals/ snow

leopard.

Reference Type:

Author, Analytic (01): Prokopov K. P.

Title, Analytic (04): The Red Data Book of vertebrate animals in eastern Kazakhstan.

Journal Title (10): Ecosphere: Eastern Kazakhstan information and analytical journal.

Date of Publication (20): 2003

Volume ID (22):

Location in Work (25): 26-28

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): After the inventory of all rare and endangered species the categories of threat in the Red Data Book of eastern Kazakhstan has changed for most of the species: 24 species were referred to category 1 (endangered species) (in Kazakhstan's Red Data Book – 14 species); 26 (14) species – to category 2 (decreasing species); 11 (24) – to category 3 (rare); and 1 (3) – to category 5 (rehabilitated). There are three nature reserves in the region: Markakol, West Alatai, and Alakol to protect wild vertebrate animals.

Keywords (45): Kazakhstan/ Eastern Kazakhstan/ Red Data Book/ categories of threat/ rare species/ snow leopard/ nature conservation/ nature reserves.

Reference Type:

Author, Analytic (01): Proskuryakov M.A.

Title, Analytic (04): Almaty nature reserve.

Journal Title (10): Nature reserves of USSR.

Date of Publication (20): 1969

Volume ID (22):

Location in Work (25): 459-464.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A description of the Almaty nature reserve is given and includes as follows: data of establishment, location, physic and geographic description, types of soils, climate, flora and fauna. In the nature reserve there are 39 mammals and 117 birds. Snow leopard, wild ibex, brown bear, lynx, wild boar, red deer, wolf, fox etc. inhabited in the nature reserve.

Keywords (45): Kazakhstan/ Almaty nature reserve/ landscape/ flora/ fauna/ birds/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Puzanov I. I.

Title, Analytic (04): Central Asia sub-area.

Journal Title (10): Zoogeography.

Date of Publication (20): 1938

Volume ID (22):

Location in Work (25): 240-244

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The author describes fauna of the Central Asia sub-area. Snow leopard is a typical inhabitant of the sub-area highlands.

Keywords (45): Central Asia/ fauna/ snow leopard.

Reference Type:

Author, Analytic (01):

Title, Analytic (04): Rare Animals and their Protection in the USSR.

Journal Title (10): Uzbekistan's Reservations and Natural Monuments. XIV General

Assembly of the International Union for Conservation of Nature and

Natural Resources.

Date of Publication (20): 1978

Volume ID (22):

Location in Work (25): 4

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It described categories of threat (Category A and Category B). Snow leopard was assessed under Category A – the species whose numbers and habitats have sharply diminished and are continuing to diminish as a consequence of direct persecution, destruction of their habitat or other causes. The snow leopard (*Pardus uncia*) inhabits the mountains of the Tien Shan range, Tarbagatai, Saur, Altai and the Sayans. Exploitation of mountain areas and depletion of stocks of wild ungulates (Siberian mountain goats and wild sheep) have led to a sharp reduction in the number of snow leopards. It is estimated that today only about one thousand leopards are left, and they have accordingly been placed under complete protection. Hunting and selective shooting are everywhere prohibited. Catching leopards is regulated by the articles of the international convention restricting trade in rare species of plants and animals.

Keywords (45): Uzbekistan/ categories of threat/ rare species/ snow leopard/ distribution/ threats.

Reference Type:

Author, Analytic (01): Rashek V. A.

Title, Analytic (04): The Chatkal State nature reserve. Aksu Jabagly nature reserve.

Journal Title (10): Nature reserves of the USSR.

Date of Publication (20): 1980

Volume ID (22):

Location in Work (25): 157-161

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes history of the Chatkal and Aksu Jabagly nature reserves' establishment and provides data concerning hydrography, soils, climate, landscapes, altitude zoning, flora and fauna, and main aspects of scientific work.

Keywords (45): Uzbekistan/ Kazakhstan/ Chatkal nature reserve/ Aksu Jabagly nature reserve/ landscape/ flora/ fauna/ birds/ mammals/ rare species/ snow leopard.

Reference Type:

Author, Analytic (01): Razmakhnin V. E.

Title, Analytic (04): Siberian wild ibex.

Journal Title (10): Ungulates. Rare animals of the USSR.

Date of Publication (20): 1977

Volume ID (22):

Location in Work (25): 164-175

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides a detailed description of biology, distribution, geographic variability, behavior, and locomotion features of ibex in the USSR. Its population was defined as 100,000 animals, main enemies being wolf, snow leopard, and golden eagle. Wolf mainly preys on ibex at the end of winter; old males, weakened during the heat mostly becoming a prey. Snow leopards prey on ibexes all year round. Golden eagles mostly prey on young ibexes.

Keywords (45): USSR/ Siberian wild ibex/ biology/ distribution/ number/ variability/ behavior/ predators/ snow leopard.

Reference Type:

Author, Analytic (01): Sapozhnikov G. N.

Title, Analytic (04): Wild sheep in Tajikistan.

Journal Title (10):

Date of Publication (20): 1976

Volume ID (22):

Location in Work (25): 199 p.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The monograph provides data concerning taxonomy, morphology, and age variability of wild sheep. There described distribution, number, population composition, behavioral patterns, reproduction, predators and parasites. Besides, a matter of conservation and sustainable use of the species is discussed. Together with wolf, snow leopard is called an enemy of *O. o. vignei* and argali (*O. o. polii*).

Keywords (45): Tajikistan/ urial/ argali/ taxonomy/ morphology/ variability/ life history characteristics/ distribution/ number/ diet/ behavior/ parasites/ predators/ snow leopard.

Reference Type:

Author, Analytic (01): Sapojnikov G.N., Yakovlev E.P., Neranov I.M.

Title, Analytic (04): Distribution and number of several endangered mammals and birds of

Journal Title (10): Natural resources and nature reserves of Tajikistan.

Date of Publication (20): 1984

Volume ID (22):

Location in Work (25): 129-143

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Many years' data connected with the distribution and number of endangered species of animals as dhole (*Cuon alpinus* Pall), striped hyena (*Hyaena hyaena* L.), snow leopard (*Uncia uncia* Shreb.) and birds of Tajikistan are given. Area of snow leopard includes the most of mountain ridges in this country. The total number is evaluated about 160-200 individuals. The record quantity of legal harvested skins of snow leopard is 64 in 1946.

Keywords (45): Tajikistan/ endangered species/ snow leopard/ number/ use.

Reference Type:

Author, Analytic (01): Sapozhnikov G.N., Golub O.N.

Title, Analytic (04): Ramit nature reserve.

Journal Title (10): Protected areas of Middle Asia and Kazakhstan.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 322-329

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The general information on Ramit nature reserve, Tajikistan as well as its physic-geographical, floristic and faunistic description is given. 7-15 snow leopards that make seasonal migrations following wild ibexes inhabit in nature reserve.

Keywords (45): Tajikistan/ Ramit nature reserve/ flora/ fauna/ snow leopard.

Reference Type:

Author, Analytic (01): Satimbekov R.

Title, Analytic (04): Nature reserves of Kazakhstan and protection of rare predatory animal

Journal Title (10): Ecologic fundamentals of protection and sustainable use of predatory

mammals.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 64-65

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There are 20 snow leopards in the Aksu-Djabagly nature reserve, and

three - four families in the Alma-Ata nature reserve. Single snow

leopards are known to be met in the Markakol nature reserve.

Keywords (45): Kazakhstan/ protected areas/ snow leopard.

Reference Type:

Author, Analytic (01): Satunin K.A.

Title, Analytic (04): Review of the Mammals in Trans Caspian region.

Journal Title (10):

Date of Publication (20): 1905

Volume ID (22): Vol. 25, issue. 3.

Location in Work (25): 56

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard Pardus uncia Schreber recorded in Trans Caspian region (in Sumbar rive) very rare and occasionally.

Keywords (45): Trans Casnian region/ snow leopard/ records.

Reference Type:

Author, Analytic (01): Severtsov N.A.

Title, Analytic (04): Travel within Turkestan region and mountain country Tien Shan survey.

Journal Title (10):

Date of Publication (20): 1873

Volume ID (22):

Location in Work (25): 152

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard Felis irbis Ehrb inhabits in Tien Shan. Irbis was

recorded in around of Issykul lake.

Keywords (45): Tien Shan/ snow leopard/ records.

Reference Type:

Author, Analytic (01): Severtsov N. A.

Title, Analytic (04): Animals. Mammalia. Typical mountain animals. Taxonomic tables of the Turkistan fauna.

Journal Title (10): Vertical and horizontal distribution of Turkistan animals (printed

according to the edition of 1873).

Date of Publication (20): 1953

Volume ID (22):

Location in Work (25): 20, 29-38, 104-105

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Geo-botanic and zoogeographical description of altitude landscape zones of Central Asia is given. Snow leopard (*Felis irbis*), ibex (*Capra sibirica*), brown bear (*Ursus leuconyx*), dhole (*Canis alpinus*) and others (10 species in total) are vertically distributed (2,348 – 3,048 m)

in the deciduous forest, fir forest and alpine meadow zones.

Keywords (45): Centarl Asia/ geographical zones/ fauna/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Sheikin A.O., Antonova L.N., Serzhanov O.S., Kunitskaya N.T., Kim

A.A.

Title, Analytic (04): Fleas of the carnivores of Kazakhstan (preliminary results of the data

1970-1888)

Journal Title (10): Status of mammal fauna in Russian and adjoining states.

Date of Publication (20): 1996

Volume ID (22):

Location in Work (25): 353-361.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The analysis of the data of national collection of Parasitological museum of Kazakh Antiplague Institute on ectoparasites from 12 species of carnivores that can be found in Kazakhstan: caracal, snow leopard, ermine, mountain weasel etc. helped to determine the species of fleas and their hosts specialization. Fleas were found on 57 animals/50 species of fleas were found, which can be specified to 23 genera, the total number is 525. The specific ones for the carnivores are 6 species fleas. The very low density of ectoparasites was indicated for caracal and snow leopard.

Keywords (45): Kazakhstan/ carnivores/ ectoparasites/ fleas/ snow leopard.

Reference Type:

Author, Analytic (01): Shnitnikov V. N.

Title, Analytic (04): Rocks and taluses. Alpine meadows. Economic value of local animals.

Journal Title (10): Fauna of Kazakhstan.

Date of Publication (20): 1934

Volume ID (22): Part. 1. South Kazakhstan.

Location in Work (25): 86-88,146-149,174

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It reviews fauna of rocks, taluses, and alpine meadows of South Kazakhstan. The most typical mammal of rocks and taluses are picas (Ochotona rutila and O. macrotis), ibex (Capra sibirica), and snow leopard (Felis irbis). Besides, snow leopard, along with Tien Shan bear (Ursus leuconyx), ibex, mountain wolf (Cuon alpinus) and others, is met in the alpine meadow zone. Zoo-export of snow leopards to the zoos does not result in extermination of the animals but generates income. Various animal species are subject to trade as zoos do not limit their collections with some specific species or groups; quite the contrary they are interested in obtaining each species. Valuable animals exported from Kazakhstan are tiger, snow leopard, Tien-Shan bear, argali, and mountain wolf. The latter costs 1,000 roubles in gold, and argali – even 1,500 roubles.

Keywords (45): Kazakhstan/ mountains/ fauna/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Shnitnikov V. N.

Title, Analytic (04): Rocks and taluses. Snow leopard, Irbis – Felis irbis Shreb.

Journal Title (10): Mammals of Semerechie.

Date of Publication (20): 1936

Volume ID (22):

Location in Work (25): 44-49, 111-114

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Semerechie, snow leopard is not a rare species. In 1931, 53 snow leopards were hunted in southern Semerechie. In the past, at the markets of Central Tien Shan one could buy skins or live snow leopards, which were in demand abroad. Probably, number of snow leopards in Semerechie has increased. Now, it can be found not only in remote areas but in the vicinity of settlements (snow leopards, for instance, were observed some 20 – 30 km from Almaty, and 60 km – from Frunze). Snow leopard preys mainly on ibex (*Capra sibirica*), snow-cock (*Tetraogallus himalauenses*), and numerous argali - in some areas. The animal will never attack a man, even if wounded.

Keywords (45): Kazakhstan/ Semerechie/ fauna/ snow leopard.

Reference Type:

Author, Analytic (01): Shukurov E.J., Mambetaliev U.A., Surappaeva V.M., Lebedeva L.P., Chelpakova Zh.M., Balbakova F.N.

Title, Analytic (04): List of of species included in Red data Book of Republic of Kyrgyzstan.

Journal Title (10): Annals of nature in protected areas of Kyrgyz Republic. Metodical guide.

Date of Publication (20): 2004

Volume ID (22):

Location in Work (25): 83

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It gives List of species included in Red data Book of Republic of Kyrgyzstan (1984). Totally 13 mammals including snow leopard listed in Kyrgyz Red data book.

Keywords (45): Kyrgyzstan/ Red data book/ list of species/ snow leopard.

Reference Type:

Author, Analytic (01): Sludskiy A. A.

Title, Analytic (04): Snow leopard or irbis – *Pantera (Uncia) uncia* Schreber (1776).

Journal Title (10): Volumes of the Institute of Zoology, Kazakh SSR.

Date of Publication (20): 1973

Volume ID (22): Vol. 34. Hunting mammals of Kazakhstan

Location in Work (25): 74-83

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A detailed description of the snow leopard habitat in Turkmenistan, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China, Pakistan, and India is given. Provided are data concerning its distribution and population size in the USSR, Kazakhstan and other neighbour countries, as well as its habitat, catching, and fur trade. Reduction of the snow leopard catching volumes for zoological trade to 10 or less animals is recommended to preserve the species; establish two new highland nature reserves; improve the management of snow leopard raising in captivity.

Keywords (45): USSR/ Kazakhstan/ snow leopard/ species range/ distribution/ number/ habitats/ hunting/ pelts/ conservation measures.

Reference Type:

Author, Analytic (01): Sludskiy A. A.

Title, Analytic (04): Mammals.

Journal Title (10): To preserve for descendants.

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 55-79

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The author describes the lot of extinct and endangered mammal species – inhabitants of various continents. Over the last 2,000 years, on the territory now occupied by the USSR, 11 species and sub-species of mammals died away and several dozens of species and sub-species are now endangered or rare and require special conservation measures. Big Felidae species include tiger (150 – 170 animals), leopard (38-48 animals, of which 20-25 permanently live in the Far East, the rest migrating), snow leopard, whose population reduced drastically (about 1,000 animals), caracal, Central Asia lynx, and manul.

Keywords (45): USSR/extinct species/ endangered species/ cats/ tiger/ leopard/ snow leopard/ caracal/ lynx/ manul.

Reference Type:

Author, Analytic (01): Sludsky A.A., Afanasiev Yu.G., Bekenov A., Grachev Yu.A., Lobachev Yu.S., Makhmutov S., Strautman E.I., Fedosenko A.K., Shubin I.G.

Title, Analytic (04): Genus Snow leopard – Uncia Gray, 1854. Snow leopard – Uncia uncia Schreber, 1775.

Journal Title (10): Mammals of Kazakhstan. Carnivora (Mustelidae, Felidae).

Date of Publication (20): 1982

Volume ID (22): Vol. III, Part 2.

Location in Work (25): 222-240

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard is rare and extinctive species that have scientific and aesthetic significance. The features of genus *Uncia* and species *Uncia uncia* are described. Also distribution, habitat, way of life, reproduction biology, behavioural patterns, migration routes, infections and parasites, enemies and competitors, number and number fluctuation, practical value of snow leopard in the Kazakhstan are given.

Keywords (45): Kazakhstan/ taxonomy/ distribution/ number/ biology/use/ snow leopard.

Reference Type:

Author, Analytic (01): Sobanskiy G. G.

Title, Analytic (04): The cat family. Snow leopard, or irbis.

Journal Title (10): Game species of the mountainous Altai.

Date of Publication (20): 1988

Volume ID (22):

Location in Work (25): 89-92

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In the Altai, there are three cat family species: snow leopard, lynx, and manul. Several tens of snow leopards inhabiting the area along river Argut and its tributaries remained in Altai. They are rarer met in south Altai along the Chikhachev, Shapshal, and Sailyughem ridges. They prey on ibex, wild sheep, roe deer, and moral. They can also attack livestock but would never kill more than one animal.

Keywords (45): Russia/ Altai/ cats/ snow leopard/ distribution/ number/ preys.

Reference Type:

Author, Analytic (01): Sokov A.I.

Title, Analytic (04): About rare carnivores of Tajikistan.

Journal Title (10): Rare mammals of USSR fauna.

Date of Publication (20): 1976

Volume ID (22):

Location in Work (25): 97-102

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The data on distribution of 10 species of rare carnivores in Tajikistan are given. *Uncia uncia uncia* inhabits in high mountain regions of Central Tajikistan and Mountain-Badakhshan province. Tajikistan has banned the hunting of snow leopard since 1968. Author proposes to establish of nature reserves in Eastern Pamir in Aksay and Modur, in basin of Istyk river as well as in area from Matcha village to Zeravshan glacier including Southern Turkestan ridge and Northern Zeravshan ridge for purpose of snow leopard conservation.

Keywords (45): Tajikistan/ Pamir/ conservation/rare species/ carnivores/ distribution/ number/ snow leopard.

Reference Type:

Author, Analytic (01): Sokov A. I.

Title, Analytic (04): Environmental prerequisites for protection and sustainable use of

predatory mammals in Tajikistan.

Journal Title (10): Proceedings of IV Congress of all-Union mammalists' society.

Date of Publication (20): 1986

Volume ID (22): Vol. 3.

Location in Work (25): 27-29

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Tajikistan it is necessary to preserve big predators listed in the Red Book, such as *Uncia uncia, Ursus arctos isabellinus, Hyaena hyaena, Felis lynx isabellina, Panthera pardus ciscaucasica*. An anthropogenic influence has resulted in the species' habitat shrinkage, deficit of food, disturbance of trophic interactions. It is necessary to restore a tiger population in the Tigrovaya Balka nature reserve, and resolve the issue of protection and sustainable use of commercial predatory species.

Keywords (45): Tajikistan/ Red data book/rare species/ carnivores/ large predators/ brown bear/ hyena/ tiger/ leopard/ lynx/ snow leopard/ decline/ protection/ sustainable use.

Reference Type:

Author, Analytic (01): Sokov A. I.

Title, Analytic (04): Snow leopard.

Journal Title (10): Red Data Book of Tajikistan.

Date of Publication (20): 1997

Volume ID (22):

Location in Work (25): 151-152

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard distributed in Pamir, Mountain Badakhshan (2500-5500 masl). Its number assessed as 250-350 individuals. There

were recorded 450 snow leopards in 1950s-1960s.

Keywords (45): Tajikistan/ Red data book/ snow leopard/ decline/ protection/

distribution/ number/ life-history/ protected measures.

Reference Type:

Author, Analytic (01): Sokolov V. E.

Title, Analytic (04): Snow leopard genus.

Journal Title (10): Taxonomy of mammals.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 238 -240

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Genus Uncia has only one species – snow leopard. Described is the length of body, length of tail, body weight, colour, skull, number of teeth, habitat, reproduction, and life expectancy. This species has no essential practical value and is included in the Red Data Book as an endangered species.

Keywords (45): Snow leopard / taxonomy/ species range/ habitats/ reproduction/ diet/ pregnancy/ birth/ cubs/ lifetime/ endangered species.

Reference Type:

Author, Analytic (01): Sokolov V. E.

Title, Analytic (04): Snow leopard.

Journal Title (10): Rare and endangered animals. Mammals.

Date of Publication (20): 1986

Volume ID (22):

Location in Work (25): 349-350

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard is an endangered species. Its number is steadily decreasing. In the USSR, snow leopard is distributed in the mountains of Central Asia: Pamir, Tien Shan, Djungar Ala-Tau, Tarbagatai, Saur. It is also met at altitudes ranging from 1,800 – 3,500 m above sea level. A total number of snow leopard in the USSR does not exceed 1,000 animals; according to other data – 2,000 animals. A decreasing number of snow leopard and its habitat shrinkage is directly related to human's pursuing snow leopards (in the USSR snow leopard was for a long time being considered as a species causing damage to livestock so authorities gave premiums for catching/shooting snow leopards) and reduction of ungulate population. Snow leopards are now protected in mountain nature reserves of the USSR: Chatkal, Aksu-Djabagly, Ramit, Besh-Aral, Sary-Chelek, and Alma-Ata.

Keywords (45): USSR/ snow leopard/ distribution/ number/ use/ protection.

Reference Type:

Author, Analytic (01): Sokolov G. A.

Title, Analytic (04): Predatory mammals of Central Siberia, status of populations, influence

of anthropogenic factors.

Journal Title (10): Mammal fauna of Russia and adjacent areas. Materials of conference.

Date of Publication (20): 2003

Volume ID (22):

Location in Work (25): 329-330

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The species resources of Siberia's fauna decrease from south to north. The highest diversity of species is observed in the mountain systems, the lowest – in sub-zones of south and central taiga and steppe zone, where the cat family species are absent. During the last 50 – 150 years number of species has decreased two- to tenfold. Imperfect hunting management, farming, and mining operations resulted in transformation of the animal habitats. Population of fox, polecat, and sable has reduced; snow leopard and dhole becoming endangered species. If current tendencies continue to develop some species will disappear in the region in decades to come.

Keywords (45): Russia/ Siberia/ predators/ status/ snow leopard.

Reference Type:

Author, Analytic (01): Sokolov V. E.

Title, Analytic (04): Family Felidae.

Journal Title (10): Life of animals.

Date of Publication (20): 1989

Volume ID (22):

Location in Work (25): 322-326

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes big representatives of family Felidae such as lion, tiger, leopard, jaguar, snow leopard, and cheetah. The habitat of snow leopard in USSR extends from the mountains of Central Asia and South Siberia to the Altai and Tuva. It is a non-numerous species all over its habitat. There are 100 – 300 snow leopards in Nepal, about 100 – in Pakistan, and 500 – 1,000 in the USSR. The snow leopard is included in the Red Data Book of the USSR and Red List of IUCN.

Keywords (45): USSR/ distribution/ number/ snow leopard.

Reference Type:

Author, Analytic (01): Sokolov V. E., Skulkin V. S.

Title, Analytic (04): The Chatkal nature reserve.

Journal Title (10): Nature reserves of Central Asia and Kazakhstan.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 301-302

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides general information about the Chatkal nature reserve (Uzbekistan), its physico-geographical features, and description of flora and fauna. Fauna of vertebrate animals includes four fishes, two – amphibians, 11 reptiles, 176 – birds, and 33 mammals. The typical mammals of the nature reserve are fox and badger. Sometimes, steppe cat can be met too. Snow leopard and marbled polecat are seen rarely. Brown bear is quite widely distributed. Ungulates such as wild boar and ibex are widely distributed in the nature reserve.

Keywords (45): Uzbekistan/ Cahtkal nature reserve/ location/ climate/ soils/ flora/ fauna/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Sokolov V. E., Chichikin Yu. N., Tishkov A. A.

Title, Analytic (04): The Sary Chelek nature reserve.

Journal Title (10): Nature reserves of Central Asia and Kazakhstan.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 351-362

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides general information about the Sary Chelek nature reserve (Kyrgyzstan), its physico-geographical features, and description of flora and fauna. Fauna of mammals includes over 40 species. A lot of work has been done in the nature reserve in order to protect rare species, including predators such as snow leopard, lynx, and bear. Snow leopard keeps to highlands, sometime entering into the forest zone. It was observed near lake Sary-Chelek. The following ungulate species inhabit the nature reserve: wild boar, ibex, and roe-deer. Population of wild boar consists of 700 – 800 animals, ibex – 350 – 400, roe-deer – 300 animals.

Keywords (45): Kyrgyzstan/ Sary Chelek nature reserve/ location/ climate/ soils/ flora/ fauna/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Sosnovskiy I. P.

Title, Analytic (04): Backstage of the Zoo.

Journal Title (10): Live museums.

Date of Publication (20): 1981

Volume ID (22):

Location in Work (25): 52-79

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes the Moscow Zoo services organization in a popular form; examples from every day work of the technical staff and zoo technical and veterinary service, animals' behaviour outside the cages are given.

Keywords (45): Russia/ Moscow Zoo/ zootechnik service/ veterinary service/ reptiles/ birds/ mammals/ carnivores/ snow leopard.

Reference Type:

Author, Analytic (01): Sosnovskiy I. P.

Title, Analytic (04): Snow leopard or irbis.

Journal Title (10): Rare and endangered animals: leafing through the Red Data Book of

the USSR.

Date of Publication (20): 1987

Volume ID (22):

Location in Work (25): 106-110

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In a popular form, it tells about rare vertebrate animals included in the Red Data Book of the USSR, their biology, behavioral patterns, threats and measures being taken to protect them. Total number of snow lappard in the USSR is defined as 2,000 animals, 200 snow lappards

leopard in the USSR is defined as 2,000 animals. 200 snow leopards live in zoos throughout the world. The animals successfully reproduce themselves in the Moscow, Kaunas, and Alma-Ata zoos. Snow

leopard's maximum life expectancy in enclosures is 22 years.

Keywords (45): USSR/ Red Data book/ endangered species/ snow leopard.

Reference Type:

Author, Analytic (01):

Title, Analytic (04): Special protected areas (nature reserves, natural and national parks,

zakazniks, natural monuments).

Journal Title (10): National report on status natural environment and use of natural

resources in Republic of Uzbekistan.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 91-92

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The list and brief description of existing protected areas of Uzbekistan

are given. The snow leopard recorded in Chatkal and Hissar nature

reserves.

Keywords (45): Uzbekistan/ protected areas/ snow leopard.

Reference Type:

Author, Analytic (01): Strautman Ye. I. Bekenov A.

Title, Analytic (04): Rare and endangered vertebrate animas of Kazakhstan, and their protection.

Journal Title (10): Protection of flora and fauna in Uzbekistan.

Date of Publication (20): 1978

Volume ID (22):

Location in Work (25): 33-34

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Kazakhstan, there are 158 mammal species, 485 bird species, 52 – reptile and 12 – amphibian species, and about 150 fish species, of which 31 mammal species, 43 – bird species, eight reptile, one amphibian and four fish species need protection. Snow leopard is referred to endangered species. Six nature reserves and 43 preserves have been established to protect rare and endangered animal and plant species in Kazakhstan.

 $Keywords~(45): \bar{K}azakhstan/~Red~Data~Book/~conservation~measures/~extinction~risk/~endangered~species/~snow~leopard/~protected~areas.$

Reference Type:

Author, Analytic (01): Sultanov G.S.

Title, Analytic (04): Animals protection, reproduction and use.

Journal Title (10): Nature and man.

Date of Publication (20): 1974

Volume ID (22):

Location in Work (25): 30-37

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Caspian tiger, cheetah, moral have disappeared from the region's fauna. Species such as hyena, leopard, manul are endangered, honey badger and caracal available only on the south of Karakalpakstan, lynx, snow leopard and saiga are rare species. The implemented protection measures helped Iranian otter, Bukhara red deer, marchor, and Severtsev's sheep escape a total extermination. To preserve many valuable animals in Uzbekistan small investments in their habitats improvement are required. Nature reserves and preserves occupy a total area of more than 220,000 ha in the country. All rare species of Central Asia's fauna are under protection of the state.

Keywords (45): Uzbekistan/ fauna/ extinct/ close to extinct/ rare species/ snow leopard/ conservation measures/ territorial protection.

Reference Type:

Author, Analytic (01): Sultanov G.S.

Title, Analytic (04): Some results of nature conservation in Uzbekistan.

Journal Title (10): Wild life protection and rehabilitation.

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 3-4

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Last years scientists from Zoology institute have analyzed the modern status of vertebrates of Uzbekistan and trend of the populations. As a result 63 vertebrates including 22 mammals including snow leopard were recommended to be include into preparing Red Data book of Uzbekistan as endangered species. Unfortunately many of specialists' recommendations connected with establishing new protected areas are not putting into practice.

Keywords (45): Uzbekistan/ vertebrates/ rare species/ Red data book/ snow leopard.

Reference Type:

Author, Analytic (01): Sultanov G.S.

Title, Analytic (04): The Red Book of Uzbekistan and animal protection issues.

Journal Title (10): Hunting and wildlife conservation in Uzbekistan.

Date of Publication (20): 1984

Volume ID (22):

Location in Work (25): 36-40

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Due to development of new lands and increased anthropogenic pressure animals are displaced from their habitats. Intense poaching caused dying away a number of animals such as Turan tiger, moral, and kulan in Uzbekistan at the end of 19th – beginning of 20th century. The endangered species are marchor, cheetah, lynx, snow leopard, caracal, and cobra. Species put on the verge of a total extermination are included in the national Red Data Book (22 mammal species, 31 bird species, five reptile and five fish species). The introduction of some species such as raccoon, European fallow deer, nylghau, and chinchilla was unsuccessful.

Keywords (45): Uzbekistan/ rare species/ habitats/ poaching/ introduction/ reintroduction/ mammals/ birds/ reptiles/ fishes/ snow leopard.

Reference Type:

Author, Analytic (01): Syroyechkovskiy E. E., Rogacheva E. V.

Title, Analytic (04): Kazakhstan and Central Asia.

Journal Title (10): Fauna of the USSR.

Date of Publication (20): 1975

Volume ID (22):

Location in Work (25): 223-231

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Common features, origin, and landscape and zonal peculiarities of fauna in Kazakhstan and Central Asia are described. This region is part of the Mediterranean and Central Asia sub-zone of Golarctic, while north-eastern part of Kazakhstan is incorporated in the Round-boreal sub-zone. The main features of nature (sharply continental climate, vast valleys and well-marked zoning combined with a sophisticated system of vertical mountain zoning) stipulate the abundance and diversity of fauna. There are over 100 fish species, some 100 reptile and amphibian species, about 500 bird and 160 mammal species here. Snow leopard can be found in Kazakhstan's part of the Altai, in the Tien Shan and Pamir mountains.

Keywords (45): Central Asia/ Kazakhstan/ fauna/ snow leopard/ distribution.

Reference Type:

Author, Analytic (01): Taryannikov V. I.

Title, Analytic (04): Distribution, biology, and current population status of rare predatory

mammals in the Western Hissar.

Journal Title (10): Ecology, protection and reintroduction of vertebrates in Uzbekistan.

Date of Publication: 1986

(20)

Volume ID (22):

Location in Work (25): 107-109

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Described are distribution, biotopical distribution, food, and some biological features of *Uncia uncia, Felis lynx, Lutra lutra*. New finds of *Lutra lutra* were observed at the Kashkadarya river. All the species' populations were counted and the reasons for their decrease given. In the author's opinion, number of snow leopard is decreasing as number of Siberian ibex is decreasing too and snow leopard is being poached for. There are 10-12 snow leopards on the slopes of the Hissar ridge.

Keywords (45): Uzbekistan/ Western Hissar ridge/ distribution/ number/ diet/ rare species/ decline/ poaching/ lynx/ otter/ ibex/ snow leopard.

Reference Type:

Author, Analytic (01): Tokmergenov T., Dubanaev A., Asanbaev S., Bekmurzaev E.

Title, Analytic (04): Mammals of Sary Chelek nature reserve.

Journal Title (10): Biodiversity of Western Tien Shan. Status and perspectives.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 239-245

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There are more than 40 species of mammals in Sary Chelek nature reserve, Kyrgyzstan. Brief characteristics of these species and their distribution. Also current status of important species, tendencies in number dynamic are presented. Snow leopard inhabited in alpine zone of Muz-Tor, Kara Toko, Kulatai, Alatai mountains. Total number is 2-3 individuals according data of 1997-2000.

Keywords (45): Kyrgyzstan/ Sary Chelek nature reserve/ mammals/ status/ distribution/ number/ snow leopard.

Reference Type:

Author, Analytic (01): Tsherbakov B. V., Kochnev A. G.

Title, Analytic (04): About rare and endangered mammal species in the East Kazakhstan

region.

Journal Title (10): Fauna of Kazakhstan and its conservation problems.

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 203-204

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Given is data concerning numbers and distribution of yellow lemming on the Korjun cape and in the Karakas tract; dhole – in the tundra zoneof the Azu-Tau ridge (South Alati) between Matabay and Urunkhaikoy, in the Salkanchok mountains; concering an encounter with snow leopard (March 25, 1981) in the upper river Bukhtarma near eastern extremity of the South Altai ridge, and argali in the mountain group Kalby-Baicha, the Taldy, Koktau, Monraka mountains (an area between Kusty and Kizil-Gain), near summit Shorbas.

Keywords (45): Kazakhstan/Eastern Kazakhstan province/ distribution/ number/ rare species /snow leopard.

Reference Type:

Author, Analytic (01): Tsherbina E. I.

Title, Analytic (04): Snow leopard or irbis.

Journal Title (10): Commercial game species of Turkmenistan.

Date of Publication (20): 1970

Volume ID (22):

Location in Work (25): 55-56

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In the USSR, snow leopard is distributed in the mountains of Central Asia and South Siberia. A considerable number of snow leopards are met in the mountains of Tajikistan, Pamir, Tien Shan, Altai, and Tuva ASSR. Snow leopard is extremely rare in Turkmenistan. It is occasionally caught/shot in Kopet-Dag.

Keywords (45): Turkmenistan/ snow leopard/ distribution.

Reference Type:

Author, Analytic (01): Tursunov Kh.

Title, Analytic (04): The Ugam-Chatkal national park. The Chatkal state biosphere nature reserve.

Journal Title (10): Ecologic problems of the West Tien Shan.

Date of Publication (20): 2003

Volume ID (22):

Location in Work (25): 7-10

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Established in 1990, the Ugam-Chatkal national park occupies an area of 668,350 ha and is the largest protected natural area in Uzbekistan. This area is famous for its rich species diversity. A number of rare and endangered plant and animal species, including among the others snow leopard, is found here. Being a core zone (strictly protected natural area), the Chatkal nature reserve is an integral part of the park. Snow leopard is periodically observed in the Tereksay river valley in the Maidantal area.

Keywords (45): Uzbekistan/ Ugam Chatkal national park/ Chatkal nature reserve/ flora/ fauna/ endangered species/ snow leopard.

Reference Type:

Author, Analytic (01): Uchitelskaya gazeta.

Title, Analytic (04): Return of snow leopard.

Journal Title (10): Newspaper Uchitelskaya gazeta.

Date of Publication (20): January 3 1984

Volume ID (22):

Location in Work (25):

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): 10 snow leopards have settled in western extremities of the Hissar ridge. Almost 25 years ago, disturbed by anthropogenic activity, this rarest fauna representative abandoned the area being threatened. In a habitat usual for this species have now been created the Kyzylsu and Miraki nature reserves and the species is now rendering the highlands inhabitable again. Wild boar, Turkestan lynx, long-tailed marmot, snow leopard and black vulture, a total of 200 animal and bird species, can be found now in this area.

Keywords (45): Uzbekistan/ Hissar ridge/ Kyzylsu nature reserve/ Miraki nature reserve/ birds/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Vashetko E.V., Esipov A.V., Bykova E.A., Botchkaryov S.M.

Title, Analytic (04): Materials for studying fauna of terrestrial vertebrates inhabiting Hissar

Nature Reserve.

Journal Title (10): Behavioral ecology (Animals and soil ecology).

Date of Publication (20): 1994

Volume ID (22):

Location in Work (25): 33-34

Location/URL (38):

Notes (42):

Abstract (43): A vertebrate fauna inventory in the Hissar nature reserve showed that various natural zones here are certainly inhabited by 45 species: amphibians – one species; reptiles – 12; mammals – 32. Reptiles such as Alai snake-eyed skink and Central Asian viper and mammal species such as wolf, fox, brown bear, weasel, grey hamster can be found in all natural zones here up to 4,000 m above sea level. Snow leopard, Turkestan lynx, and long-tailed marmot can be found in the juniperous

forests and higher elevations.

Keywords (45): Uzbekistan/ Hissar nature reserve/ geographical zone/ cadastre/ fauna/ distribution/snow leopard.

Reference Type:

Author, Analytic (01): Vashetko E.V., Esipov A.V., Bykova E.A., Botchkaryov S.M.

Title, Analytic (04): On the fauna of terrestrial vertebrates inhabiting Hissar Nature Reserve

Journal Title (10): Proceeding of Nature Reserves in Uzbekistan.

Date of Publication (20): 1996

Volume ID (22): Issue 1.

Location in Work (25): 35-43

Location/URL (38):

Notes (42): Full text available

Abstract (43): The data on the species composition, numbers and distribution of the terrestrial vertebrates over territory Hissar nature reserve are discussed. About 60 species of amphibians, reptiles and mammals have been recorded in the reserve as a result of our own researches and the analyses of communication. There were recorded 5-7 individuals of snow leopard in Kyzylsu site of nature reserve and 15 individuals in Miraki site of nature reserve in 1979-1981.

Keywords (45): Uzbekistan/ Hissar nature reserve/ fauna/ vertebrates/ amphibians/ reptiles/ mammals/ lizards/ snakes/ insectivores/ bats/ carnivores/ ungulates/ rodents/ lagomorphs/ species composition/ biodiversity assessment/ snow leopard.

Reference Type:

Author, Analytic (01): Vashetko E.V., Esipov A.V., Bykova E.A., Kreuzberg-Mukhina E.A.

Title, Analytic (04): Snow Leopard bibliography in Central Asia.

Journal Title (10): Status and perspectives of the protected area network in Central Asia.

Date of Publication (20): 2004

Volume ID (22):

Location in Work (25): 358-383

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Reference List of the Snow Leopard investigation included publications on the studying various questions of ecology and conservation of the Snow Leopard in Central Asia (355) for the period with 1851 for 2004. The most important work on this species in the region, as well as results of the analysis of timing of publications was

described.

Keywords (45): Central Asia/ bibliography/ snow leopard.

Reference Type:

Author, Analytic (01): Vereschagin N. K., Sablina T. B.

Title, Analytic (04): Rare mammals in the USSR: protection challenges.

Journal Title (10): Rare mammals of USSR fauna.

Date of Publication (20): 1976.

Volume ID (22):

Location in Work (25): 3-9.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A group of rare and endangered species was segregated within the game and non-game mammals of the USSR. Some species in the group were formerly referred to game species. But due to over-hunting and the absence of measures aimed at their reproduction the population dropped sharply. Mammal fauna of the USSR includes more than 80 species that require special protection. The Red list of IUCN includes, among the others, white bear, Transcaucasian sub-species of brown bear, Amur and Turan tigers, snow leopard, Caucasian and Amur leopards, caracal, cheetah, Tien-Shan and Ussuri sub-species of dhole, Atlantic walrus, island seal, kulan, Bukhara red deer, New Land reindeer, goitered gazelle, Menzbier's marmot.

Keywords (45): USSR/ mammals/ game species/ non-game species/ rare species/ vanishing species/ IUCN Red Data Book/ snow leopard.

Reference Type:

Author, Analytic (01): Vinogradov B.S. & Flerov K.K.

Title, Analytic (04): I.Pamir. II. East Bukhara.

Journal Title (10): Animals of Tajikistan, life and value for man.

Date of Publication (20): 1935

Volume ID (22):

Location in Work (25): 15-19, 23-27

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): East Pamir is a transitive zone on border Tibetan, East Tien Shan, Western Tien Shan, Himalaya and Afghani fauna and is characterized by low diversity of mammals. Ungulates of east part are presented: Ovis polii и Capra sibirica sakeen. Predators are presented Canis lupus laniger (Tibetan subspecies); Vulpes vulpes ferganensis, Mustela alpina alpina, Mustela erminea ferganae, Mustela nivalis pallida, Martes foina, Felis lynx izabellina, Uncia uncia uncia (Central Asian and South Asian spp.); Ursus arctos aff. syriacus, Meles meles, Lutra lutra seistanica (South West Asian species). East Bukhara (Turkestan, Zeravshan, Hissar, Peter the Great, Darvaza, etc., and also the Western Pamir) is characterized by presence of representatives of the Indo-Afghani fauna (Capra falconeri, Ovis vignei, Cervus affinis, Mellivora indica (?), Vulpes canus, Otonycteris hemprichi, Nesokia indica, Rattus turkestanicus), Southwest Asia fauna (Felis pardus tulliana, Felis tigris septentrionalis, Canis aureus aureus, Lutra lutra seistanica, Hyaena hyaena), as well as species of widely distributed within the Southern and Southwest Asia (Felis ornata, Felis chaus, Vormela peregusna, Maries foina, Mustela nivalis, Ursus arctos syriacus, Hystrix hirsutirostris), or Central Asian species (Felis lynx isabelina, Mustela alpina, Mustela erminea, Otocolobus manul, Vulpes vulpes karagan и др.). Endemics of East Bukhara are Microtus carruthersi, Microtus bucharensis, Sorex bucharensis.

Keywords (45): Tajikistan/ Pamir/ East Bukhara/fauna/ endemics/ snow leopard.

Reference Type:

Author, Analytic (01): Volozheninov N. N., Taryannikov V. I., Abdunazarov B. B.

Title, Analytic (04): Rare and endangered mammals and birds of Southern Uzbekistan.

Journal Title (10): Ecology and protection of rare and endangered vertebrate species in

Uzbekistan.

Date of Publication (20): 1985

Volume ID (22):

Location in Work (25): 23

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard is a common species for upper part of the Hissar ridge and northern part of the Baisun ridge. There are about 30 snow leopards there. The animals often attack livestock, sometimes even entering into sheltered cattle-pens. In two of four of such cases snow leopards were caught and killed; in two other cases they had gone, having wounded the people. Usually the predators attack sheep and goats, rarer – cows. The most frequently snow leopard preys on ibex and often – wild boar. Local people catch/shoot no less than 10 snow leopards per year. Protection measures include the prevention of poaching and withdrawal of rifled guns from local communities.

Keywords (45): Uzbekistan/ Hissar ridge/ Baisun ridge/ snow leopard/ number/ preys/ poaching/ conservation measures.

Reference Type:

Author, Analytic (01): Volozheninov N. N., Yeziev Kh. Sh., Aromov B. A.

Title, Analytic (04): Ecology of some mammals in western part of the Hissar ridge.

Journal Title (10): Ecology, protection and introduction of vertebrate species in Uzbekistan.

Date of Publication (20): 1986

Volume ID (22):

Location in Work (25): 92-101

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Additional data on *Lepus tolai*, *Ochotona rutila*, *Citellus relictus*, *Marmota caudata*, *Sus scrofa*, *Capra sibirica* in western part of the Hissar ridge, Uzbekistan, is given here based on materials of the years 1978-1983. Information about distribution of these species, their numbers, food, enemies, and other ecologic issues is provided. *Capra sibirica* is a principle species snow leopard preys on. In 1899 – 1983, the authors recorded more than 20 cases of snow leopards' killing ibex of different ages.

Keywords (45): Uzbekistan/ Hissar ridge/ number/ diet/ enemies / preys/ Siberian ibex/ snow leopard.

Reference Type:

Author, Analytic (01): Vorobjov A.G.

Title, Analytic (04). Ungulates (Artiodactyla) of the Western Tien Shan (Distribution and

number within Kyrgyzstan).

Journal Title (10): Biodiversity of Western Tien Shan.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 68-72

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Materials on numbers and densities of 8 ungulates (Sus scrofa nigripes, Capreolus pygargus tianschanicus, Cervus elaphus, Cervus nippon, Cervus dama, Capra sibirica formosovi, Ovis ammon karelini, Bison

bonasus) within the Chatkal and Talas Ranges are given. A critical analysis is also presented on prospects for development of the commercial hunting tourism as opportunities for additional assignments in measures on conservation of the Western Tien Shan

biodiversity

Keywords (45): Kyrgyzstan/ Western Tien Shan/ distribution/ number/ ungulates/

predators/ wolf/ lynx/ snow leopard/ commercial hunting.

Reference Type:

Author, Analytic (01): Vorobjov G.G.& Ostastshenko A.N.

Title, Analytic (04): The winter distribution of the ibex (Capra sibirica) and wild boar (Sus

scrofa) in the Chatkal River Basin.

Journal Title (10): Biodiversity of Western Tien Shan.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 73-74

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There are 3 independent groups of the ibex in the Chatkal River basin and 2 ones of the wild boar. Therefore the populations of these animals

are vulnerable in wintertime. The wild sheep (Ovis *ammon*) wide distributed in Chatkal valley earlier has not been found out. Pskem population of ibex is assessed as 30 individuals, Chandalash population – as 450 ibexes and Chatkal population is assessed less than 200 individuals. Number of wild boar in Pskem ridge is 200 individuals; total number of

Chandalash population is 20-25 boars.

Keywords (45): Kyrgyzstan/ Chatlal valley/ distribution/ number/ Siberian ibex/ wild

boar.

Reference Type:

Author, Analytic (01): Voronov A.G., Drozdov N.N., Myalo E.K.

Title, Analytic (04): Predatory mammals.

Journal Title (10): Biogeography of the world.

Date of Publication (20): 1985

Volume ID (22):

Location in Work (25): 233-235, 255-257

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Predatory mammal in mountains are submitted by widely widespread species, such, as wolves, to a lynx and bears, and characteristic species for the high mountains, well adapted to mountain conditions and not going down below Alpine zone (a snow leopard, or irbis, occupying mountains of the Central Asia etc.)

mountains of the Central Asia, etc.).

Keywords (45): Predators/ mountains/ endangered species/ Red Data bok/snow leopard.

Reference Type:

Author, Analytic (01): Vyrypaev V. A.

Title, Analytic (04): Ecologic prerequisites for predatory mammal conservation in the

mountain biocenosis of the Issyk-Kul area.

Journal Title (10). The ecologic fundamentals of protection and sustainable use of

predatory mammals.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 18-19

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A decreasing number of predatory mammal species is connected with anthropogenic activity. Number of snow leopard is directly dependent

on anthropogenic activity. A snow leopard population directly depends on food resources, such as ibex, marmot, rarer - argali and snow-cock

in summer, and ibex, roe-deer, and rarer argali – in winter.

Keywords (45): Kyrgyzstan/ predators/ snow leopard/ preys/ threats.

Reference Type:

Author, Analytic (01): Vyrypaev V.A., Litvinov V.F.

Title, Analytic (04): The influence of sarcoptosis on the population of Capra sibirica Pall.

in Western Tien Shan.

Journal Title (10): Proceedings of First Unternational Theriological Congress. – Moscow.

Date of Publication (20): 1974

Volume ID (22): Vol. II.

Location in Work (25): 292-293.

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Given is data concerning disease (sarcoptosis) of Siberian ibex (*Capra sibirica*) in Western Tien Shan. The carriers of the disease are adult males of *Capra sibirica* during distant migrations that as a rule take place in anticipation of snowy winters or owing to human influence. Ibexes are not merely infected with sarcoptosis but perish enmasse from the disease. In the first year the disease strikes down, in the main, migrants - adult males. Predators including snow leopard kill the weakened animals. During the recent five years the density of *Carpa sibirica* at the Chatkal Mountain-Forest Reservation dropped 2.3-fold as a result of sarcoptosis and owing to the migrations caused by the reduction of the population. Is recommended: 1. Stringent veterinary control at places of possible contacts between infected domestic animals and healthy wild ungulates. 2. Using modern technology migration routes of ungulates should be studied for elaborating effective measures of quarantine.

Keywords (45): Uzbekistan/ Western Tien Shan/ Chatkal nature reserve/ sarcoptosis/ predators/ snow leopard.

Reference Type:

Author, Analytic (01): Yakhontov A. A.

Title, Analytic (04): Fauna of mountains.

Journal Title (10): Uzbekistan. Economic and geographic characteristics.

Date of Publication (20): 1950

Volume ID (22):

Location in Work (25): 60 - 61

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Ibex, whose population has reduced due to over-hunting, inhabits the alpine meadow zone in Uzbekistan. Ibex had entirely disappeared in some areas. Wild sheep, a common inhabitant of the alpine zone, has drastically decreased in number. Marhur can still be found in the mountains of Kugitang and Babatang. Wild sheep is a common species for the alpine zone. Predator animals such as snow leopard, bear, and sometimes wolf and fox can be found in this zone. A typical inhabitant of highlands is marmot – an object of fur-trade.

Keywords (45): Uzbekistan/ mountains/ fauna/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Yachontov A.A.

Title, Analytic (04): The cats - Felidae.

Journal Title (10): Zoology for teacher.

Date of Publication (20): 1970

Volume ID (22):

Location in Work (25): 277-280

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes Felidae family species (lion, tiger, leopard, snow leopard, lynx, cheetah): identification features, life-history characteristics, type

of habitat, diet and distribution.

Keywords (45): USSR/ Felidae/ snow leopard/ identification features/ life-history/

habitats/ diet/ distribution.

Reference Type:

Author, Analytic (01): Yazan Yu. P.

Title, Analytic (04): The Almaty state nature reserve.

Journal Title (10): Nature reserves of the USSR.

Date of Publication (20): 1980

Volume ID (22):

Location in Work (25): 162-164

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): History of the Alma-Ata nature reserve establishment, its location physical and geographic data, climate, and vegetation zones are described. Fauna of the protected area is represented by 64 mammal species, and about 200 bird species. Briefly described are behavioural patterns of roe deer, moral, wild boar, Siberian ibex, snow leopard, lynx, brown bear, and marten, and other mammals of the mountainous area.

Keywords (45): Kazakhstan/ Almaty nature reserve/ establishment/ climate/ physiographic factors/ plants/ animals/insects/ reptiles/ birds/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Yanushevich A. I.

Title, Analytic (04): Status of hunting industry in Kyrgyzstan.

Journal Title (10): Proceedings of conference "Capacity and production of game preserves

in the USSR".

Date of Publication (20): 1969

Volume ID (22): Part. II.

Location in Work (25): 110-113

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): In Kyrgyz SSR, there are 26 fur animal species, including three acclimatized, six wild ungulate and 70 bird species. They all can serve

as objects of commercial and sport hunting. 56 snow leopards, 120 wild boars, 96 roe-deers, 121 ibexes, and 14 argalis were caught 1962 – 1967. A majority of the animals were exported from the country. The Kyrgyz SSR is one of the main suppliers of snow leopards, hunting for

which for the sake of its fur-skin is prohibited.

Keywords (45): Kyrgyzstan/ game species/ fur-trade/ snow leopard.

Reference Type:

Author, Analytic (01): Yanushevich A. I.

Title, Analytic (04): To be protected by the Red Data Book.

Journal Title (10): Nature and man.

Date of Publication (20): 1977

Volume ID (22):

Location in Work (25): 37-39

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The Red Data Book of the USSR includes 111 mammal species and 67 bird species. The following species inhabit or from time to time come into Kyrgyzstan: free-toiled bat, Menzbier's marmot, red dog, Tien Shan brown bear, marbled polecat, Central Asia otter, Turkistan lynx, manul, snow leopard, antelope, Tien-Shan wild sheep, and bison; Dalmatian pelican, rose pelican, black stork, flamingo, bar-headed goose, white-headed duck, osprey, short-toed eagle, tawny eagle, imperial eagle, golden eagle, white-tailed eagle, Pallas's sea eagle, bearded vulture, Himallayan griffon, Sociable plover, Saker falcon, Peregrine falcon, great bustard, houbara, little bustard, etc.

Keywords (45): Kyrgyzstan/ Red Data book/ birds/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Yanushevich A. I., Tarbinskiy Yu. S.

Title, Analytic (04): Mountain animals.

Journal Title (10): Fauna of Kyrgyzstan.

Date of Publication (20): 1968

Volume ID (22):

Location in Work (25): 84-99

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Fauna of invertebrate and vertebrate species in highlands of Kyrgyzstan is described. Mammals are represented by ibex and mountain sheep, snow leopard, dhole, stone marten, Royle's mountain vole, picas, bear, grey and long-tailed marmot; birds are represented by black and griffon vultures, Egyptian vulture, snow-cocks, chukars, rose finch, swallows, swifts, etc. A brief description of their way of life is given

Keywords (45): Kyrgyzstan/ highly mountain/ insects/ birds/ mammals/ snow leopard/ life history.

Reference Type:

Author, Analytic (01): Yanushevich A.I., Chichikin Yu.N.

Title, Analytic (04): Sary Chelek nature reserve.

Journal Title (10): Protected areas of Soviet Union.

Date of Publication (20): 1969

Volume ID (22):

Location in Work (25): 481-485

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides data concerning location, climate, landscapes, altitude zoning, flora and fauna of the Sary Chelek nature reserve. Currently in nature reserve recorded 41 mammals, 157 birds, 5 reptiles, 2 amphibians and 5 fishes. Snow leopard, wild ibex, argali and dhole inhabited in alpine zone. Number of ibex is 400 individuals.

Keywords (45): Kyrgyzstan/ Sary Chelek nature reserve/ mammals/ birds/ reptiles/ amphibians/ fishes/ snow leopard/ wild ibex.

Reference Type:

Author, Analytic (01): Yanushevich A. I., Aizin B. M., Kadyraliev A. K., Umrikhina G. S.,

Fedyanina T. F., Shukurov E. Dj., Grebenyuk R. V., Tokobaev M. M.

Title, Analytic (04): Mammals of Kyrgyzstan.

Journal Title (10):

Date of Publication (20): 1972

Volume ID (22):

Location in Work (25): 377-380

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A description of snow leopard, its taxonomy, distribution, habitat, number, behavior, food, reproduction, parasites, infections, and practical importance is given. In Kyrgyzstan, *irbis* was found in the Chatkal, Kyrgyz, Talas ridges, and Terskei Alatoo. An official annual snow leopard hunting rate ranged from 10 (1955) to 54 skins (in 1936) in 1930-s through 1950-s. 17 snow leopards were caught for the purpose of zoo-export only in 1965-1966. Its skin has no special value and is used by local people for decoration of dwellings and making collars.

Keywords (45): Kyrgyzstan/ snow leopard/ taxonomy/ distribution/ habitats/ number/ life history characteristics/ practical use.

Datatabase:

Reference Type:

Author, Analytic (01): Yudin Yu.

Title, Analytic (04):

Journal Title (10): Newspaper "Ferganskaya Pravda"

Date of Publication (20): December 17, 1983

Volume ID (22):

Location in Work (25):

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A review of history of creation of the Red Book, International Red List, and Red Data Book of the USSR, Red Data Books of Soviet Republics is made. Snow leopard (with a total population of 10 animals) is included in the Red Data Book of the Uzbek SSR as an endangered species. The author gives the examples of careless attitude to plants and animas resulting in decrease of their populations or even extermination.

Keywords (45): IUCN Red Data book/ USSR Red Data book/ Uzbek Red Data book/ extinct species/ rare species/ snow leopard/ poaching.

Reference Type:

Author, Analytic (01): Zakhidov T. Z.

Title, Analytic (04): Irbis – (Felis uncia) – Ilvrs.

Journal Title (10): Zoological encyclopedia (Mammals).

Date of Publication (20): 1960

Volume ID (22):

Location in Work (25): 67

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The author provides information about snow leopard taxonomy, distribution, habitat and appearance. Biology of this animal is understudied. Snow leopard is able to make long jumps. It feeds upon ibex, wild sheep, marmots, partridge, and sometimes livestock, but never man. Gestation period is three months, at the end of May female gives birth to two or three cubs. Being very occasional, purchase of skin is of no practical value.

Keywords (45): Uzbekistan/ snow leopard/ taxonomy/ distribution/ habitats/ life history/ practical value.

Reference Type:

Author, Analytic (01): Zakhidov T. Z. Meklenburtsev R. N., Bogdanov O. P.

Title, Analytic (04): Snow leopard *Uncia uncia* Schreb. Distribution of fauna elements over

Central Asia.

Journal Title (10): Nature and fauna of Central Asia.

Date of Publication (20): 1971

Volume ID (22): Vol. 2. Vertebrate animals.

Location in Work (25): 234-235, 259-264

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard inhabits the mountainous ecosystems from Tarbagatai to Hissar and Pamir. It feeds upon large animals such as ibex, argali, roe deer, and sometimes domestic sheep, rodents, and birds (most frequently – snow cock). The skin of this animal is not of significant value and is rarely an item of trade. In many countries, zoos will readily buy snow leopards. There is no danger for a man to catch snow leopard since even being wounded during a hunt, the animal would never attack the man. An encounter with snow leopard in the mountains will always end safely for human being, as it is always first to spot a man and go away unnoticed.

Keywords (45): Central Asia/ snow leopard/ distribution/ preys/ behavior/ practical value.

Reference Type:

Author, Analytic (01): Zakirov A.

Title, Analytic (04): Cats.

Journal Title (10): Vertebrates in the Ferghana valley.

Date of Publication (20): 1974

Volume ID (22):

Location in Work (25): 196-198

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It describes a fauna complex of the Fergana valley in Uzbekistan. Three cat family species are found there (wild cat, Turkistan lynx and snow leopard). Snow leopard (*Uncia uncia*) inhabits eastern part of the Chatkal ridge in the mountains of Akchala. Known are cases of snow leopard's preying on sheep in summer but such cases are extremely rare and the harm is negligent. This is a highly endangered species and therefore full prohibition of shooting the animals is required.

Keywords (45): Uzbekistan/ Ferghana valley/ mammals/ cats/ snow leopard/ distribution.

Reference Type:

Author, Analytic (01): Zakirov A.

Title, Analytic (04): Rare and endangered predatory species in Uzbekistan.

Journal Title (10): Ecology of mountain mammals.

Date of Publication (20): 1982

Volume ID (22):

Location in Work (25): 47-48

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There are 20 predatory mammal species in Uzbekistan. Tien Shan brown bear, marbled polecat, lynx, and snow leopard are very rare species, while honey badger, manul and leopard are close to dying-

Keywords (45): Uzbekistan/ carnivores/ endangered species/ snow leopard.

Reference Type:

Author, Analytic (01): Zamoshnikov V.D.

Title, Analytic (04): Current status of biodiversity of Western Tien Shan.

Journal Title (10): Biodiversity of Western Tien Shan. Status and perspectives.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 101-108

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): This paper deals with current status of biodiversity of Western Tien Shan. Just from mammals 6 species: Menzbier's marmot, dhole, Central Asian otter, snow leopard, Turkestan lynx, Tien Shan argali are included in Red dada Book of Kyrgyzstan.

Keywords (45): Kyrgyzstan/ biodiversity/ Red Data Book/ snow leopard.

Reference Type:

Author, Analytic (01): **Zheengaziev A.**

Title, Analytic (04): Geographical locaton, wild life and relief of Sary-Chelek state biosphere nature reserve and Besh-Aral state nature reserve.

Journal Title (10): Biodiversity of Western Tien Shan. Planning of an effective using of

the ground areas.

Date of Publication (20): 2002

Volume ID (22):

Location in Work (25): 7-10

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The territorial description, floristic and faunistic characteristics of Sary-Chelek and Besh-Aral reserves and relief are given. There were registered about 40 species of mammals and 160 species of the birds in Sary-Chelek reserve. Ibex, roe deer, argali, wild boar, brown bear, snow leopard, lynx, porcupine, badger, marmot, hare etc. live here; muskrat, wood marten and American mink are acclimatized. Menzbier's marmot, fox, badger, wolf, brown bear, snow leopard, wild

ibex and roe deer inhabited in Besh Aral reserve.

Keywords (45): Kyrgyzstan/ Sary Chelek nature reserve/ Besh Aral nature reserve/ location/ relief/ flora/ fauna/ vertebrates/ snow leopard.

Reference Type:

Author, Analytic (01): Zheleznyakov D. F., Kolesnikov I. I.

Title, Analytic (04): Order Predators.

Journal Title (10): Proceeding of the mountain-forest state nature reserve.

Date of Publication (20): 1958

Volume ID (22): Edition 1.

Location in Work (25): 110-112

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Data about distribution of stone marten, ermine, weasel, badger, bear, wolf, fox, and snow leopard in the Chatkal nature reserve is provided. In Tien Shan, snow leopard is not a rare species, and even a rather common species in some places. In the nature reserve, snow leopard was observed near the mountain Kurgan-Tash in 1948.

Keywords (45): Uzbekistan/ Chatkal nature reserve/ mammals/ snow leopard.

Reference Type:

Author, Analytic (01): Zhirnov L. V., Bychkov V. A.

Title, Analytic (04): Extinct mammals of the USSR fauna and their distribution over

natural zones.

Journal Title (10): Urgent issues of zoogeography.

Date of Publication (20): 1975

Volume ID (22):

Location in Work (25): 83-84

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): 18 taxons of rare and endangered mammals of the USSR are distributed over natural zones such as deserts and semi-deserts including riverine forests and elevations; mountains and highlands; forests and forest-steppe; and offshore strips of closed seas. A majority of endangered species is associated with deserts

and mountains of Central Asia and Kazakhstan.

Keywords (45): Rare species/ extinct species/ desert/ semi desert/ mountain/ highly mountain/ forest/ forest-steppe/ riverine forests/ aquatic zone/ snow

leopard.

Reference Type:

Author, Analytic (01): Zhirnov L. V., Vinokurov A. A., Bychkov V. A.

Title, Analytic (04): Rare and endangered species of the USSR.

Journal Title (10): Mammals and birds.

Date of Publication (20): 1978

Volume ID (22):

Location in Work (25): 91-94

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): A description of snow leopard number, distribution, reproductive biology, death reasons, and conservation measures in the USSR, where northern and north-western border of its habitat runs, is given. The population of snow leopard in the USSR is 500 – 1,000 animals. In the Inner Tien Shan, 400 snow leopards were caught 1936 through 1970. The maximum of 120 skins was purchased in Pamir in 1956 – 1958. Population of snow leopard directly correlates with population of ibex, a fact being verified by data collected on a long-term basis. Moreover, snow leopard was for a long time considered as a harmful animal, shooting of which was encouraged by premiums and resulted in reduction of snow leopard population.

Keywords (45): USSR/ snow leopard/distribution/ number/ practical use.

Reference Type:

Author, Analytic (01): Zhiryakov V. A.

Title, Analytic (04): Ibex. Rare ungulate species of the Almaty nature reserve and their

protection.

Journal Title (10): Rare mammals of the USSR fauna.

Date of Publication (20): 1976

Volume ID (22):

Location in Work (25): 141-154

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Collected are data on rare ungulates in the Almaty nature reserve in 1968-1973. Since recently the population of goitered gazelle has dropped sharply and is now 20-30 animals per seven ha. The nature reserve shall be expanded in order to protect the animals. Argali inhabits a desert area in the mountains of Greater and Lesser Kalkana. Argali sometimes migrates outside the nature reserve. Ibex inhabits a mountainous part of the nature reserve, its population being 10-13 animals per 1,000 ha. Predators have negligible impact on the ibex population (12.5 percent of deaths), which is preyed on solely by snow leopard and wolf.

Keywords (45): Kazakhstan/ Almaty nature reserve/ ungulates/ number/ aerial census/ goitered gazelle/ argali/ ibex/ predators/ wolf/ snow leopard/ poaching/ disturbance.

Reference Type:

Author, Analytic (01): Zhiryakov V. A.

Title, Analytic (04): The influence of large predators on wild mammal populations in the Almaty nature reserve.

Journal Title (10): Ecologic fundamentals of protection and sustainable use of predatory mammals.

Date of Publication (20): 1979

Volume ID (22):

Location in Work (25): 37-39

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): There are following large predators in the Almaty nature reserve: wolf (5-6), snow leopard (single occasions), Turkistan lynx (single occasions), and Tien Shan brown bear (15-20). The share of wild mammals (roe-deer, ibex, wild boar, argali, gazelle, moral, and badger) being eaten by predators is 18.2 percent, about 60 percent of the entire

prey falling to the share of wolf.

Keywords (45): Kazakhstan/ Almaty nature reserve/ animals/ predators/ snow leopard/ wolf/ preys.

Reference Type:

Author, Analytic (01): Zhiryakov V. A.

Title, Analytic (04): The influence of the predators on population trend of the ungulates in

the Almaty nature reserve.

Journal Title (10): All-Union Conference on cadastre and censusing of the animals.

Date of Publication (20): 1989

Volume ID (22):

Location in Work (25): 199-201

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The data on predators and ungulates population dynamics in Almaty

Nature reserve (Kazakhstan) in 1983-1987s are given. The number of snow leopard is stable (3-5 individuals), the density is 0.06 indi/1000 ha. An insignificant increase of Siberian ibex' number (660 to 700)

with density of 36 indi/1000 ha is recorded.

Keywords (45): Kazakhstan/ predators/ ungulates/ dencity/ population trend/ snow

leopard.

Reference Type:

Author, Analytic (01): Zhiryakov V. A.

Title, Analytic (04): Wolves' role in biocenosis of the Almaty nature reserve (North Tien Shan).

Journal Title (10): Proceedings of V all-Union congress of mammalogy society of the

Academy of Science of the USSR.

Date of Publication (20): 1990

Volume ID (22): Vol. II.

Location in Work (25): 278-279

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): The quantity of ungulates is high in the nature reserve: moral (100-120), roe deer (500-650), Siberian ibex (660-700), and wild boar (50-80). Moreover some 5,000 heads of livestock (mostly sheep) are grazed in a buffer zone in summer. Among big predators (snow leopard, bear,

lynx) wolf kills about 40 percent of ungulates.

Keywords (45): Kazakhstan/ Almaty nature reserve/ ungulates/ number/ livestock / red deer/ roe deer/ ibex/ wild boar/ predators/ brown bear/ wolf/ snow leopard.

Reference Type:

Author, Analytic (01): Zhiryakov V. A., Djanyspaev A. D.

Title, Analytic (04): Snow leopard in the Almaty nature reserve. Short messages about snow

leopards.

Journal Title (10): Rare animals of Kazakhstan.

Date of Publication (20): 1986

Volume ID (22):

Location in Work (25): 51-54

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Snow leopard is a common species for the Almaty nature reserve due to numerous wild ungulates, particularly ibexes (about 600 ibexes at a density of 32 animals per 1,000 ha) inhabiting the area. According to the data of 1982 there were 0.5 footprints of snow leopard per 10 km of transect. The remains of ibex, roe deer, squirrel, gray vole mouse and birds were found in faeces of snow leopards. Snow leopard attacks their prey unexpectedly, being in wait for it in such places where prey is difficult to escape from. When hunt is successful the prey is killed almost instantly. Snow leopard feeds upon the same prey for several

Keywords (45): Kazakhstan/ Almaty nature reserve/ snow leopard/ preys/ ungulates/ rodents/ ibex/ number.

Reference Type:

Author, Analytic (01): Zhiryakov V. A., Antsiferov V. M., Antsiferova A. I., Tuguzakov B.

T., Khomullo O. N.

Title, Analytic (04): The Almaty nature reserve.

Journal Title (10): Nature reserves of Central Asia and Kazakhstan.

Date of Publication (20): 1990

Volume ID (22):

Location in Work (25): 102-114

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): It provides general information about the Almatya nature reserve (Kazakhstan), its physico-geographical features and description of flora and fauna. Snow leopard inhabits alpine zone and goes down as low as forest-meadow zone following ibex in winter. There are two or three families of snow leopard in the nature reserve. The population of ibex

is 600 - 700 animals.

Keywords (45): Kazakhstan/ Almaty nature reserve/ location/ climate/ soils/ flora/ fauna/ snow leopard/ number.

Reference Type:

Author, Analytic (01): Zhiryakov V.A., Baidavletov R. Zh.

Title, Analytic (04): Ecology and behavior of the Snow leopard in Kazakhstan.

Journal Title (10): Selevinia. The zoological journal of Kazakhstan.

Date of Publication (20): 2002

Volume ID (22): N 1-4.

Location in Work (25): 184-199

Location/URL (38):

Notes (42): Full text available

Abstract (43): The data on spreading, numbers and population density of snow leopard in Kazakhstan are given in this article. The total number of the snow leopard in Kazakhstan is evaluated in 100-110 individuals. The everywhere occurred numbers' reduction under the influence of the anthropogenic factors is observed. The snow leopard' inhabitation area varies from 20 to 120 square kilometers depending on its regions. Sex and composition of the population and its aggregative behavior are given. The dynamics of numbers and mortality are estimated.

Keywords (45): Kazakhstan/ distribution/ number/ density/ population size/ habitats/ marking/ migration/ diet/ prey species/ hunting/ faeces/ sex/ age/ population dynamics/ reproductive activity/ competitors/ mortality/ snow leopard.

Reference Type:

Author, Analytic (01): Zimina R. P.

Title, Analytic (04): Biology and biotopical distribution of mammals. Predators.

Distribution of mammals by vertical zones.

Journal Title (10): Regularities of vertical distribution of mammals.

Date of Publication (20): 1964

Volume ID (22):

Location in Work (25): 25-27, 33-38, 96-99

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): Fauna of the Issyk-Kul depression and the surrounding ridges consists of heterogeneous elements different in their ecologic features and origin. In highlands, more common are species of Central Asia's origin (gray marmot, snow leopard, dhole, ibex, argali, etc.). Snow leopard is met in Terskey-Alatau. Each year hunters catch/shoot one to three snow leopards in the Chon-Kizilsu river basin. In the Djeti-Oguz district, up to five – eight snow leopards are caught each winter. Snow leopard is also caught/shot in the river basins Chon-Kizilsu,

Karabatkak, Ortok, Archtor, Tekeletor, and Shatly.

Keywords (45): Kyrgyzstan/ Issy-Kul derression/ fauna/ snow leopard/ distribution.

Reference Type:

Author, Analytic (01): Zinchenko Yu. K.

Title, Analytic (04): About characteristic of mammal fauna in the Markakol nature reserve

Journal Title (10): Proceedings of All-Union conference on cadastre and fauna counts.

Date of Publication (20): 1989

Volume ID (22): Part. II.

Location in Work (25): 39-41

Location/URL (38):

Notes (42): Full text available ...

Abstract (43): 50 mammal species permanently live in the nature reserve. There penetrate snow leopard, wolf, corsac, and wild boar on a relatively regular basis. Moral, roe deer, and elk migrate outside the Markakol depression in winter. Though mentioned in literature as species inhabiting the nature reserve, beaver, stone marten, and dhole are not met there today.

Keywords (45): Kazakhstan/ Markakol nature reserve/ mammals/ snow leopard.