

Ursus thibetanus Asiatic Black Bear

Vulnerable

Taxonomic Notes

The principal color phase is black, with a white "crescent moon" on the chest. Rare brown phases are also known, and recently a blond (and mixed blond and black) color phase was discovered in Cambodia, Thailand, and Laos (Galbreath et al. 2000).

Geographic Range Information

Fossil remains of the Asiatic black bear have been found as far west as Germany and France, but in historic times the species has been limited to Asia. This species occupies a narrow band from southeastern Iran (Gutleb and Ziaie 1999) eastward through Afghanistan and Pakistan, across the foothills of the Himalayas, to Myanmar. It occupies all countries in mainland Southeast Asia except Malaysia. It has a patchy distribution in southern China, and is absent in much of east-central China. Another population cluster exists in northeastern China, the southern Russian Far East, and into North Korea. A small remnant population exists in South Korea. They also live on the southern islands of Japan (Honshu and Shikoku) and on Taiwan and Hainan. The species now occurs very patchily through much of its former range, especially in Iran, Afghanistan, Pakistan, mainland southeast Asia and China. Its distribution in parts of China and Myanmar remains very poorly known.

The distribution of the Asiatic black bear roughly coincides with forest distribution in southern and eastern Asia (FAO 2006), except that in central and southern India this species is replaced by the sloth bear (*Melursus ursinus*), in southern Thailand and into Malaysia it is replaced by the sun bear (*Helarctos malayanus*) and north and west of the Russian Far East it is replaced by the brown bear (*Ursus arctos*). However, the Asiatic black bear overlaps the ranges of each of these species, especially the sun bear in a large portion of Southeast Asia.

Range Countries

Afghanistan Bangladesh Bhutan Cambodia China

India

Iran, Islamic Republic of

Japan

Korea, Democratic People's Republic of

Korea, Republic of

Lao People's Democratic Republic

Myanmar

Nepal

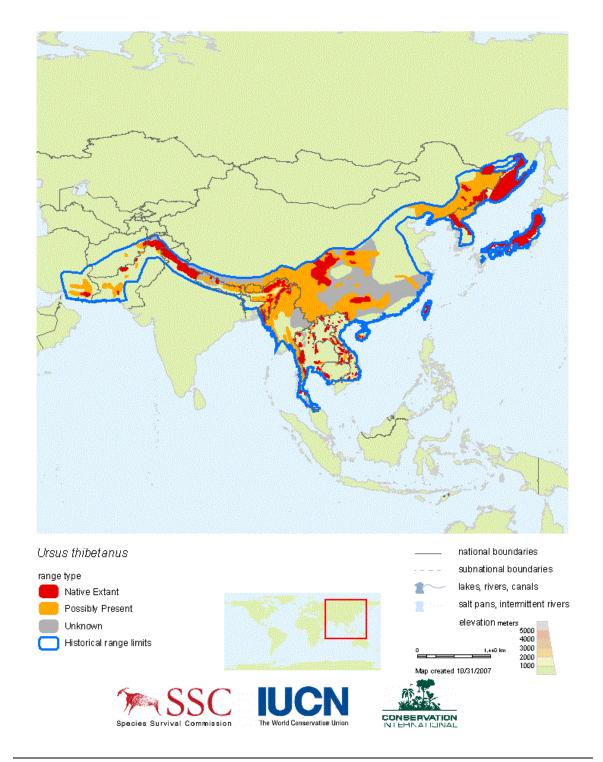
Pakistan

Russian Federation

Taiwan, Province of China

Thailand

Viet Nam



Population Information

No rigorous population estimates exist for this species. Japan formerly posed estimates of 8–14,000 bears on Honshu Island, but these are no longer considered valid. Russian biologists have presented a number of density estimates, yielding a rangewide estimate of about 5–6,000, but the reliability of these is unclear (Aramilev 2006). Likewise, rough

density estimates have been made for some portions of India and Pakistan, which have been extrapolated country-wide (7-9000 in India: Sathyakumar 2006, 1000 in Pakistan: Sheikh 2006), but without corroborating methodology or data. A host of recent countrywide estimates have been posed for Asiatic black bears in China, ranging from 15–46,000 (summarized by Garshelis 2002, Gong and Harris 2006), with an official government estimate (in 2003) of about 28,000; none of these estimates have been substantiated.

Habitat and Ecology Information

Asiatic black bears occupy a variety of forested habitats, both broad-leaved and coniferous, from near sea level to an elevation of 4300m (in northeastern India, A. Choudhury, Rhino Foundation for Nature, pers. comm.). They also infrequently use open alpine meadows. Individual bears move to different habitats and elevations seasonally (Izumiyama and Shiraishi 2004), tracking changes in food abundance. Foods include succulent vegetation (shoots, forbs and leaves) in spring, turning to insects and a variety of tree and shrub-borne fruits in summer, and finally nuts in autumn (Bromlei 1965, Reid et al. 1991, Huygens et al. 2003). In some places the diet contains a sizeable portion of meat from mammalian ungulates (which they either kill or scavenge, Hwang et al. 2002)

In temperate forests, Asiatic black bears rely heavily on hard mast in autumn, in part to put on sufficient fat reserves for winter denning (hibernation). Therefore, these bears tend to focus their activities in habitats with high abundance of oak acorns, beechnuts, walnuts, chestnuts, hazelnuts, or stone pine seeds (Schaller et al. 1989, Hashimoto et al. 2003). When Asiatic black bears feed in hard mast trees they often break branches and pile them up in the canopy, forming what appears to be a platform or "nest". Males may socially exclude females from rich stands of hard mast (Huygens and Hayashi 2001, Hwang 2003).

In northern latitudes, where food becomes unavailable in winter, both sexes hibernate. In the most northerly parts of their range, bears enter dens as early as October and exit as late as the end of May (Seryodkin et al. 2003). They den in rock crevices, in hollow trees or stumps, under upturned trees, in dug-out earthen dens, or in ground nests. In Russia, Asiatic black bears have been reported to select flat river bottoms for denning (Seryodkin et al. 2003), whereas in central China they move to high elevation rocky outcrops on steep slopes (Reid et al. 1991). Hunters often have knowledge of the sorts of places and types of dens that the bears tend to use. Denning and active black bears are also subject to predation by other Asiatic black bears, brown bears, and tigers (Seryodkin et al. 2005).

In the tropics, Asiatic black bears generally do not hibernate, except females giving birth during winter (Hwang and Garshelis 2006). They still make use of hard mast, but additionally consume numerous species of soft fruits. In Thailand, for example, Asiatic black bears were found to feed on >160 species of tree-borne fruits. Sympatric sun bears also eat most of these same fruits. Both species most often climb (apparently for feeding) trees in the cinnamon (Lauraceae) and teak (Labiatae) families. Both species live

together in lowland habitats (<1200m), but Asiatic black bears predominate at higher elevations (R. Steinmetz, in prep.).

Asiatic black bears also use regenerating forests, which may have a high production of berries or young bamboo shoots. They also feed in plantations, where they may damage trees by stripping the bark and eating cambium, and in cultivated areas, especially corn and oat fields and fruit orchards (Carr et al. 2002, Yamazaki 2003, Mizukami et al. 2005, Gong and Harris 2006, Vinitpornsawan et al. 2006).

Asiatic black bears generally breed during June–July and give birth during November–March; however, timing of reproduction is not known for all portions of the range. Age of first reproduction is 4–5 years, and they normally produce litters of 1 or 2 cubs every other year (at most). Maximum lifespan is over 30 years, but average lifespan is less in the wild.

Threat Information

Habitat loss due to logging, expansion of human settlements, roadway networks, and hydro-power stations, combined with hunting for skins, paws and especially gall bladders are the main threats to this species.

Habitat loss and degradation is most severe in the southern portion of the range. In India, <10% of the species' range is within protected areas (PAs), and areas outside PAs are subject to development projects and extraction of wood for fuel and livestock fodder (Sathyakumar 2006). In Bangladesh, where forest cover is now <7% of the land area, Asiatic black bears survive only in small remnant patches in the east, generally near the Myanmar border. Myanmar, although still well forested (nearly 50%), is fourth in the world in the annual rate of loss of forested area (among countries occupied by all species of bears, it is second only to Indonesia: FAO 2006). Thailand has lower forest cover (<30%), but much of its remaining forests are within PAs, and about half of these are occupied by black bears (Vinitpornsawan et al. 2006). Forest area has recently been increasing in Vietnam, but much of the present remaining forest is highly degraded from both legal and illegal lumbering (Nguyen Xuan Dang 2006).

Forest area is increasing rapidly in China, which is now first in the world in terms of area gained per year. This increasing forest area stems from mandated government programs aimed mainly toward reducing flooding and erosion; the replanted trees may or may not be particularly suitable for bears. However, good forest habitat does persist in northeastern China, Taiwan, Korea, Russia, and Japan. In Japan, black bear range has expanded with increasing forest area and diminishing rural human populations (Oi and Yamazaki 2006). Meanwhile, the number of people killed or injured by Japanese black bears has been on the rise (presumably reflective of the increasing bear population), and the same may be true in some parts of China (J. Gong, Sichuan Forestry Dept., Chengdu, pers. comm.).

The major threat to bears in China and Southeast Asia is the commercial trade in live bears and bear parts, especially gall bladders (bile). China initiated commercial bear farming in 1984, ostensibly to satisfy the demand for bile by practitioners of Traditional Chinese Medicine (TCM; and also Traditional Korean Medicine, TKM). The bile is periodically drained, so the captive bears do not have to be killed; it was claimed that this practice would thereby reduce the taking of wild bears. However, these farms were initially stocked with wild bears, and although the Chinese farms are purportedly now mainly self-propagating (with some continuing exceptions), there is no evidence that their existence has reduced the killing (poaching) of wild bears. In Vietnam, many small-scale bile farms have been started, which were stocked by several thousand bears removed from the wild (from Vietnam as well as from neighboring countries). The condition in which these bears are kept precludes successful breeding and cub rearing; in fact, most of these farms do not attempt to breed their bears. Moreover, although this practice has been illegal since 1992, with regulations strengthened in 2002, the number of wild-caught farmed bears in Vietnam is estimated to have increased by an order of magnitude in less than a decade (J. Robinson and G. Cochrane, Animals Asia Foundation, pers. comm.).

A surplus of bile is produced by the 8000–10,000 bears currently kept on Chinese bear farms, spurring efforts to find markets in nontraditional uses of bile (e.g., lotions, shampoos, cosmetics); meanwhile, many practitioners of TCM/TKM believe that bile from wild bears is more effective at healing various ailments, and are thus willing to pay higher prices for this product and may be disinclined to use substitutes (Chang et al. 1995, Kang and Phipps 2003). The market for bear paws also appears to be increasing commensurate with an increasing number of wealthy people who find it within their means to indulge in this very expensive delicacy.

The demand for these bear products has fueled a growing network of international trade throughout Southeast Asia, and has turned many subsistence hunters into commercial hunters. Most commercial trade routes eventually terminate in China (Saw Htun 2006; C. Shepherd, TRAFFIC SE Asia, pers. comm.). However, it is difficult to assess the true extent of this trade because only a small fraction of the parts are confiscated. Moreover, with no reliable population estimates or monitoring system it is not possible to evaluate the actual impacts on populations. Nevertheless, it seems highly probable that this commercially-driven trade in parts is unsustainable and therefore causing populations to decline.

The capture of live bears presents yet another threat to this species. In several Southeast Asian countries Asiatic black bears are routinely confiscated from people attempting to raise them as pets. In Pakistan, several thousand bears were taken from the wild for exhibitions (referred to as bear baiting) in which individual bears (with canines and claws removed) fight with dogs. This practice was made illegal in 2001, but continues to some extent.

Conservation Measures

The most beneficial conservation measure for Asiatic black bears would be to substantially lessen the demand for bear products, and thus reduce hunting and trade. The species is protected under both international and national laws, but often these laws are not enforced. It has been included on CITES Appendix I since 1979. The so-called Baluchistan bear, a subspecies (*U. thibetanus gedrosianus*) living in the arid thorn forest in the Baluchistan region of southern Pakistan and Iran, was listed as Critically Endangered (B1 + 2abc, C2a) in the 1996 IUCN Red List, and is nationally listed as critically endangered in Pakistan. Authorities have proposed a protected area to assist in the recovery of this very small, isolated population (Sheikh 2006).

In most range countries Asiatic black bears are listed as a protected species. For example, they are protected under Class 2 of China's Wildlife Protection Law (a limited number of permits are issued to kill nuisance animals), and under Schedule I of the Indian Wildlife (Protection) Act. In South Korea they are designated as a national monument (No. 329) within the Cultural Properties Protection Law and also as an Endangered Wild Animal. In Japan, this species is listed under the Law for Conservation of Endangered Species of Wild Fauna and Flora, which for trade requires certification of legal take; however, gall bladders and paws are exempted. Throughout Southeast Asia this species is totally protected in every range country, with the exception of Myanmar, where this species is classified as "normally protected", meaning that it may be killed with a special license (although such licenses are rarely issued; Saw Htun, Wildlife Conservation Society, Myanmar, pers. comm.).

Sport hunting of Asiatic black bears is legal only in Japan and Russia. Russia reports a legal harvest of 75-100 bears/year and an estimated illegal take of about 500 bears/year. Sport harvests of black bears in Japan average about 500/year and have been slowly declining since the late 1980s due to diminishing interest in hunting (Oi and Yamazaki 2006). However, a high number (generally 1,000–2,000, but as many as 4,000) of nuisance black bears are killed annually (using guns, traps, and snares) in towns or agricultural areas of Japan.

Farming bears for bile presents another conservation difficulty that needs to be resolved. In Vietnam bears are still being removed from the wild to supply farms. In China, whereas the farms themselves may not require restocking from the wild, the excessive bile produced may fuel the market, and thus may actually increase demand for bile from wild bears. In South Korea, where wild Asiatic black bears have been nearly extirpated, 2000 bears are kept and propagated in captivity and it is believed that bile and other parts from this captive population supply an illicit market.

Efforts are underway in South Korea to restore the wild bear population through restocking, initially with captive-born bears, but more recently with orphaned wild bears

from Russia. Some Southeast Asian countries, like Cambodia and Thailand are also considering reintroducing bears from captivity.

Throughout much of the southern portion of the range of this species, efforts to reduce habitat degradation outside PAs and to increase the number and/or area of PAs would be highly beneficial. An increasing number of PAs are being established in China, India, and a few other countries within the range of Asiatic black bears (Chape et al. 2003), mainly to protect other species, but serving as well to increase protection for bears. Additionally, the recently amended (2003) Indian Wild Life (Protection) Act provides options for new categories of PAs that could be established to form travel corridors between existing PAs.

Red List Assessment

Category: Vulnerable Criteria: A2cd+3d+4d

Rationale:

Widespread illegal killing of bears and trade in parts, combined with loss of habitat indicate that this species is likely declining in most parts of its range, especially in Southeast Asia and China. Questionnaire surveys also indicate declining numbers in Taiwan, with areas of local extirpation caused by habitat degradation and illegal hunting. Japan appears to be the only range country that has documented an increasing number of Asiatic black bears, reflected by an increasing area of occupied range (Oi and Yamazaki 2006).

Although actual data on population sizes or trends are lacking, it seems likely, given the rate of habitat loss and uncontrolled exploitation that the world population has declined by 30–49% over the past 30 years (3 bear generations) and that this rate will continue during the next 30 years unless abated by the implementation of significant conservation measures.

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Assisted with range mapping: Ahmad, I., Aramilev, V., Chan, C.B., Chauhan, N.P.S., Choudhury, A., Dang, N.X., Galbreath, G., Ghaemi, R., Gong, J., Goodrich, J., Gutleb, B., Han, S-H., Harris, R., Holte, C., Htun, S., Hwang, M-H., Islam, A., Kanchanasaka, B., Khan, M., Kostyria, A., Kusakari, H., Liu, F., Long, B., Modaqiq, A.W., Olsson, A., Sarker, S., Sathyakumar, S., Seryodkin, I., Steinmetz, R., Trent, A., Tsubota, T., Vintpornswan, S., Vongkhamheng, C., Walston, J., Wang, Y., Wang, W., Yadav, B., & Yamazaki, K.

Evaluators: Garshelis, D. & McLellan, B.

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Previous Red List Assessment Rationale

Category: Vulnerable

Criteria: A1cd

(Categories and Criteria version 2.3, 1994)

Year Assessed: 1996

Assessor/s: Bear Specialist Group