

# General Biology of Species in This Report

## Malayan sun bear (sun bear, honey bear)

*IUCN category: Data Deficient, CITES listing: Appendix I*

The Malayan sun bear (*Ursus malayanus*, *Helarctos malayanus*) inhabits forests of Southeast Asia in northeastern India, Myanmar, Bangladesh, southwestern China, Thailand, Laos, Cambodia, Vietnam, Malaysia, Brunei, and Indonesia. Two subspecies have been proposed based on morphological and craniometric differentiation: Bornean sun bear (*H. m. eurypilus*) are smaller than all other sun bears (*H. m. malayanus*) from Sumatra and mainland Asia (Horsfield 1825; Meijaard 2004).

The Malayan sun bear is the smallest of the eight living bear species, with extremely long curved claws, inward curved front legs, proportionally large feet strong jaw muscles and disproportionately large canines, and the longest tongue of all bears.

Tropical evergreen rainforests are the sun bear's main habitat. These rainforests cover a variety of habitat types, varying from lowland dipterocarp forests, peat swamp forests, freshwater swamp, forests on limestone/karst hills, hill forests, lower montane forest, dry deciduous forests, and other forest types on mainland Southeast Asia.

Sun bears are omnivores, and primarily feed on termites, ants, beetle larvae, bee larvae and honey, and a large variety of fruits when available (Wong et al. 2002; Fredriksson et al. in press). Little is known about the behavior or social structure of wild sun bears. Sun bears do not seem to have a defined breeding season and usually one cub is born (Schwarzenberger et al. 2004)

(Gabiella M. Fredriksson)

## Asiatic black bear (Asian black bear, Himalayan black bear, moon bear)

*IUCN category: Vulnerable, Critically Endangered (Iran, Pakistan), CITES listing: Appendix I*

Asiatic black bears (*Ursus thibetanus*) are medium-sized bears, with adult males weighing 50-200 kg and adult females 40-125 kg. They are distributed widely in Asia, from Japan in the east to Iran in the west. Asiatic black bears are currently reported to inhabit Iran, Afghanistan, Pakistan, India, Nepal, Bhutan, China, Russia, Bangladesh, Myanmar, Thailand, Laos, Cambo-

dia, Vietnam, North and South Korea, Taiwan, and Japan. Seven subspecies have been recognized: *U. t. japonicus* (Japan), *U. t. formosanus* (Taiwan), *U. t. ussuricus* (South East Russia, North and South Korea, and North Eastern China), *U. t. gedrosianus* (Iran and Pakistan), *U. t. laniger* (Western Himalayas), *U. t. mupinensis* (South Western China) and *U. t. thibetanus* (other regions) (Pocock 1932; Wozencraft 2005).

Asiatic black bears feed mainly on plant parts; however they also feed on insects, beehives, mollusks and other mammals when opportunity allows. Their food habits change seasonally and geographically. In the warm temperate zone, they generally feed on leaves, herbaceous vegetation and bamboo shoots (in spring and early summer), and on berries, arboreal fruits and arboreal mast crops (in autumn).

Asiatic black bears can breed at age 4 or 5. The mating season varies geographically, from as early May to as late as August. In northern part of their distribution, mating is reported to take place in June and July. Cubs are usually born in January or February. Litter sizes are most often two. Hibernation can be relatively long in the cold north, which may last from October to April. In warmer southern areas, black bears can be active year-round (Nowak 1991).

(Toru Oi, Sayaka Shimoinaba, Gong Jien)

## Brown bear (grizzly bear)

*IUCN category: "Lower Risk", CITES listing: "Appendix II, Appendix I (Populations of Bhutan, China, Mexico and Mongolia, Ursus arctos isabellinus)*

Brown bears (*Ursus arctos*) are second only to polar bears (*Ursus maritimus*) in size among the 8 bear species. Adult males weigh from 130 to 400kg, and adult females from 80 to 230kg (McLellan 1994; <http://www.bearbiology.com/brwnbear.htm>). This variation is owing largely to nutritional status (which in turn depends largely on foods available). They have the widest geographic distribution of any bear species, including Europe, the Middle East, much of Asia, and western North America. In Asia, brown bears are distributed in Turkey, Iran, Afghanistan, Pakistan, India, Bangladesh, Nepal, Bhutan, northeastern and western China, Mongolia, Russia, and Japan's Hokkaido Island. Their habitat also widely varies considerably, and includes desert, steppe, forest, and tundra.

Brown bears are omnivorous, eating a variety of

foods. Their diet varies regionally. However, their main food is vegetative materials such as fruits, herbs, and tubers. They also feed on insect, fish, and small and large mammals.

The mating season is from May to July, and 2-4 cubs are born in January or February during the hibernation period. Females usually become reproductively active at 4-5 years of age, and reproductive senescence has been estimated to occur at 28-29 years of age (Schwartz et al. 2003).

(Tsutomu Mano)

## Sloth bear

*IUCN category: Vulnerable, CITES Listing: Appendix I*

Sloth bears (*Melursus ursinus*) are confined to the Indian subcontinent, distributed in India, Sri Lanka, Nepal, Bhutan, and Bangladesh (Garshelis et al. 1999). Two subspecies *M. u. ursinus* and *M. u. inornatus* are recognized, the latter subspecies being endemic to Sri Lanka.

Sloth bears have a dull black, shaggy coat with a white 'U' shaped chest blaze, and a whitish muzzle. They possess special adaptations for foraging on termites, including protrusible lips, a broad palate, and a missing pair of middle upper incisors. Body lengths of adult bears vary from 140 to 190 cm. Tail lengths vary from 10 to 12.5 cm. (Prater 1980; Ward and Kynaston 1995). Male bears usually weigh 80 to 145 kg, and females weigh 55 to 95 kg.

Sloth bears use a variety of habitats including forests, grasslands, and scrub (Joshi et al. 1995; Akhtar et al. 2004) generally at elevations below 1,000 m (Garshelis et al. 1999; Johnsingh 2003). Despite their specializations for termite-foraging, fruit is an important part of their diet (Gokula et al. 1995; Joshi et al. 1997). Mating occurs mainly during May-July, and cubs are born 6-7 months later during November-January (Joshi et al. 1999; Chauhan et al. 2003). Litter size is usually one or two. Females typically carry offspring on their backs for several months, and cubs may remain with their mother for 2 years or slightly longer (Garshelis et al. 1999).

(Netrapal Singh Chauhan, Shyamala Ratnayeke)

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