Chapter 8 The Current Status and Conservation of Bears in Vietnam

Dang Nguyen Xuan

Department of Vertebrate Zoology, Institute of Ecology and Biological Resources, Vietnamese Academy of Science and Technology

Two species of bears inhabit Vietnam: Asiatic black bears (*Ursus thibethanus*) and Malayan sun bears (*Ursus malayanus*). The biology and ecology of both species are poorly studied, especially Malayan sun bears.

Distribution

Both Asiatic black bears and Malayan sun bears are found in evergreen forest, semi-evergreen forest and deciduous forests. However, they are found more frequently in remote limestone tall forests, possibly because they prefer forests with tall trees and limited human disturbance.

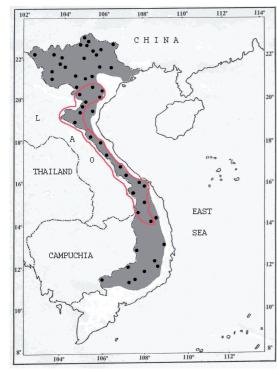
Asiatic black bears have wider distribution than sun bears. The distribution of Asiatic black bears before 1970 covered all provinces with forests (Fig. 8.1), whereas that of Malaysian sun bear was restricted to the Truong Son mountain range from Lai Chau Province on the northern border with China to Tay Ninh Province in southcentral Vietnam (Fig.8.2). Because of the war, the distribution range before 1970 was known from only a few survey records. Although acknowledged as rough, the distribution maps shown in Fig.8.1 and 8.2 were generally accepted as accurate by most Vietnamese zoologists. By the 1990s, the geographic distribution of both species had shrunk, become fragmented, and become confined mainly to national protected areas such as national parks (NP) and nature reserve (NR). Although records after 1990 are from survey results in restricted areas (not the entire range of distribution), it is generally recognized in Vietnam that both species' ranges have become fragmented.

Threats to bear populations

There have been no studies on abundance of wild bears in Vietnam. However, both species are recognized to have been seriously reduced in number. The main reasons for this decrease are illegal hunting and habitat loss. In Vietnam, bears are extensively hunted for meat, traditional medicine and trade. Vietnam's Forest Protection Department reported that the number of bears illegally captured from the wild for captive husbandry (so called bear farming) increased from 446 in April 1999 to 4,012 in July 2005 (Document dated 5 April 2005). This suggests an average of 595 bears have been illegally captured alive per year. If counting the number of dead bears, the total number of hunted bears may be as many as 1,000 bears yearly. The number may have declined in more recent years, either because the number of bears in the wild has decreased, because of better enforcement from the forest protection force, and/or because some bears are now being imported from neighboring countries.

Habitat degradation

Vietnam has complex topography; about 75% of the country consists of hills and mountains. The total land area is 330,363 km². At present, remaining natural forests total about 9 million hectares, accounting for about 30% of the country's land base (Wege et al. 1999). The main forest types are evergreen forest (64%), bamboo forest (11%), mixed forest (9%), semi-deciduous forest (8%), coniferous forest (2%), limestone forests (5%), and deciduous forest (1%). In principle, these forests are suitable habitat for both species of bears; however, these forests have been fragmented and degraded because of selective logging over many years. Only about one million hectares of primary forest remains. The Vietnamese government has implemented a policy intended to stop commercial logging. However, forests continue to be degraded due to legal, commercial timber harvest that is conducted to supply wood products for developing the country's infrastructure (e.g., construction of roads, hydropower plants, new settlement), as well as illegal lumbering by local residents.



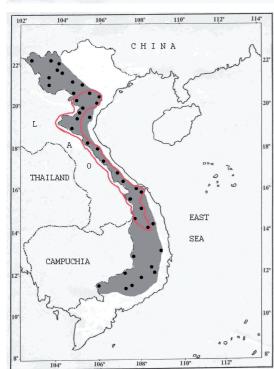
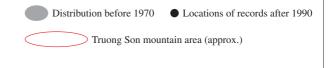


Fig.8.1: Distribution of the Asiatic black bear in Vietnam.

Shaded area represents the distribution before 1970; black dots indicate records after 1990. Provinces inhabited by Asiatic black bears include Ha Giang: Tay Con Linh NR, Bac Me NR, Du Gia NR, Bat Dai Son NR; Cao Bang: Proposed Ngoc Khe - Phong Nam NP, Pia Oac NR; Tuyen Quang: VQG Tam Dao, Tram Chu NR, Na Hang NR; Lang Son: Huu Lien NR; Bac Kan: Ba Be NP; Vinh Phuc: VQG Tam Dao; Phu Tho:Xuan Son NP, Thai Nguyen: Than Sa- Phuong Hoang NR; Lai Chau: Muong Nhe NR, Hoang Lien Son; Lao Cai: Hoang Lien NP, Van Ban District; Yen Bai: Mu Cang Chai District; Son La: Xuan Nha NR, Ta Sua NR, Copia NR, Sop Cop NR (Dang Huy Huynh 1994; Son La Forestry Department 2004a,b); Hoa Binh: Thuong Tien NR; Ha Tay: Ba Vi NP; Ninh Binh: Cuc Phuong NP; Thanh Hoa: Ben En NR, Pu Hu NR, Xuan Lien NR; Nghe An: Pu Mat NP, Pu Huong NR, Pu Hoat NR; Ha Tinh: Vu Quang NP, Ke Go NR; Quang Binh: Phong Nha - Ke Bang NP, Proposed Khe Net NR; Quang Tri (Dak Rong NR. Proposed Bac Huong Hoa NR; Thua Thien - Hue: Bach Ma NR, Phong Dien NR, Da Nang: Ba Na NR; Quang Nam: Song Thanh NP, Proposed Ngoc Linh Quang Nam NR; Kon Tum: Chu Mom Ray NP, Ngoc Linh Kon Tum NR; Gia Lai: Kon Ka Kinh NP, Kon Cha Rang NR; Phu Yen: Krong Trai NR; Dak Lak: York Don NP, Ea So NP; Dak Nong: Ta Dung NR; Lam Dong: Cat Tien District, Bao Loc District, Bao Lam District, Bi Dup- Nui Ba NP; Binh Phuoc: Bu Gia Map NP; Dong Nai: Cat Tien NP, Vinh An NR. (Le Hien Hao 1973; Pham Trong Anh 1982; Dang Huy Huynh et al. 1994; MOSTE 2000; Nguyen Xuan Dang and Pham Trong Anh in press).

Fig.8.2: Distribution of the Malayan sun bear in Vietnam.

Shaded area represents the distribution before 1970: black dots indicate records after 1990. Provinces inhabited by Malayan sun bears include Lai Chau: Muong Nhe NR, Hoang Lien Son; Lao Cai: Hoang Lien NP, Van Ban District; Yen Bai: Mu Cang Chai District; Son La: Xuan Nha NR, Ta Sua NR, Copia NR, Sop Cop NR; Hoa Binh: Thuong Tien NR; Thanh Hoa: Ben En NR, Pu Hu NR, Xuan Lien NR; Nghe An: Pu Mat NP, Pu Huong NR, Pu Hoat NR; Ha Tinh: Vu Quang NP, Ke Go NR; Quang Binh: Phong Nha - Ke Bang NP, Proposed Khe Net NR; Quang Tri: Dak Rong NR. Proposed Bac Huong Hoa NR; Thua Thien - Hue: Bach Ma NR, Phong Dien NR; Da Nang: Ba Na NR; Quang Nam: Song Thanh NP, Proposed Ngoc Linh Quang Nam NR; Kon Tum: Chu Mom Ray NP, Ngoc Linh Kon Tum NR; Gia Lai: Kon Ka Kinh NP, Kon Cha Rang NR; Phu Yen: Krong Trai NR; Dak Lak: York Don NP, Ea So NP; Dak Nong: Ta Dung NR; Lam Dong: Cat Tien District, Bao Loc District, Bao Lam District, Bi Dup- Nui Ba NP; Binh Phuoc: Bu Gia Map NP; Dong Nai: Cat Tien NP, Vinh An NR; Tay Ninh: Lo Go Sa Mat NR. (Le Hien Hao 1973; Pham Trong Anh 1982; Dang Huy Huynh et al. 1994; MOSTE 2000; Nguyen Xuan Dang and Pham Trong Anh in press)



Human-bear relationship

In Vietnamese, the common name of the Asiatic black bear is "Gau ngua" (i.e., horse bear) and the Malayan sun bear is called "Gau cho" (dog bear), perhaps referring to the animal's size and strength. Traditionally, bears are considered good friends of people. Both tigers and bears are symbols of strength. However, "tiger strength" is associated with fear and death for people, whereas "bear strength" is associated with useful heavy

labor and with helping poor people in difficult situations.

On other hand, bears are also recognized as animals of extremely high economic value. Traditionally, bear gall is considered a powerful medicine for treatment of cholera, epilepsy, bone pain, ecchymosis, and other ailments. Bear bones are also used to produce a bear balm, which is used for treatment of rheumatism and for general health improvement (Vo Van Chi 1998).

In the past, bear paws had no specific value, but now bear paws are widely used to prepare liquor which is considered a health tonic. This custom may have been imported recently from other countries. Due to low density and remoteness of their habitat from human settlements, conflicts between bears in humans are very uncommon, although claims of bears raiding corn plantations are occasionally reported.

Commercialism of bears

Husbandry of both bear species for gall extraction was banned in Vietnam on March 30, 2006 by Governmental Decree No.32/2006/ND-CP on the management of endangered, precious and rare species of forest plants and animals. However, during recent years, illegal husbandry of bears for gall extraction has developed substantially in Vietnam, and it seriously threatens the survival of bear population in the wild. The Vietnam Forest Protection Department reported that in July 2005, the number of bears in captivity had reached 4,012 (of which 3,598 were Asiatic black bears, 185 were Malayan sun bears, and 229 lacked species identification). These bears were kept in 1,088 small facilities in 57 provinces, mostly on a household basis. Most households kept 2-10 bears each; few households kept 20-40 individuals. The two largest farmers kept 80



Photo 8.1: A bear kept for gall extraction.

bears each. Bears are kept individually in small (about 1.5m wide, 2.0m long, 1.5m high) metal cages (Photo 8.1). Bears are fed twice daily with rice, fish, cattle bones, squash, melons, and other fruits and roots. Eggs and honey are added to the diet after gall extraction. Gall is extracted every 2-3 months (depending on keeper) using a long-needle syringe with the help of ultrasonic equipment for gall-bladder location. Due to poor husbandry conditions and excessive gall extraction, bears usually die after 4-5 years of exploitation, and new bears caught from wild are purchased to replace them.

Vietnam still has no bear-breeding farms; all bears used for gall extraction are captured from the wild or imported from neighboring countries (e.g., Laos, Cambodia). Hunters usually kill adult females and when capturing live cubs. This obviously causes great damage to bear populations in the wild. To help control illegal bear husbandry, all captive bears received microchip implementation for individual monitoring identification in 2005 (with financial support from the Vietnamese Government and the World Society for the Protection of Animals). Bear keepers are now required to keep these bears until their deaths, and are prohibited from extracting gall as well as replacing existing, or adding new bears. Local forest protection departments are responsible for monitoring this process. The illegal bear-keepers are not poor and their main household income is usually not from bear bile trade, so banning bile extraction will not pose a great burden on their household income even if they must continue to maintain their existing stock of bears. However, if they wish to dispose of their bears, the government has offered to arrange for transfer of unwanted bears to an appropriate captive facility. Bear owners have been requested to report regularly to local Forest Protection Units on the status of their bears. When bears die, owners have been told to inform their local Forest Protection Unit immediately, both for verifying the reason of death and for certifying the death of the bear. Otherwise, the bear owner will be punished. In turn, local Forest Protection Units are supposed to send staff members to bear-keeping households regularly to verify the number of bears and the status of their health.

Present management system

Both bear species have been designated as "Endangered" in the Red Data Book of Vietnam (MOSTE 2000), the highest level of threat. Both are also classed in the highest protection level (Group IB - strict ban of hunting and use) by Governmental Decrees 18/HDBT (17 January 1992, on promulgating a list of precious and rare

animal and plant species and regulations for their management) and Governmental Decree 32/2006/ND-CP, (30 March 2006, on management of endangered, precious and rare species of forest plants and animals). Vietnam joined CITES in 1994 (both bear species are listed in Appendix I). In general, bears are strongly protected by laws in Vietnam. Cases of violation of bear hunting and trade in bear parts that have been found and dealt with number in the hundreds. However, because trade in bear parts is so profitable, and because local enforcement's capacity is limited, bears continued to be hunted and traded in Vietnam.

With regard to bear habitat protection, Vietnam has established a network of special-use forests/protected areas of forested land. As of March 2003, the network consisted of 27 national parks, 60 nature reserves and 39 landscape protected areas, totaling 2,541,675 ha (Vietnam SR 2003). However, management of special-use forests still faces many difficulties, such as existence of many villages inside boundaries, low financial investment, and non-enforcement of management regulations. In response, the Vietnamese government approved a new "Management strategy for management of protected areas in Vietnam until 2010" in 2003 (Vietnam SR 2003).

The main law enforcement body for habitat and wild-life conservation in Vietnam is the Vietnam Forest Protection Department of the Ministry of Agriculture and Rural Development (MARD). This Department has branches at provincial and district levels and also in each protected area to implement national laws on nature and wildlife conservation. Several other governmental agencies (e.g., the Institute of Ecology and Biological Resources, the Forest Investigation and Planning Institute) and NGOs (e.g., World Wide Fund for Nature in Vietnam, Wildlife at Risk) also contribute directly to bear conservation in Vietnam.

Public education for bear conservation in Vietnam is still poorly done. There are very few educational events focused specifically on bear conservation. Some exceptions are the recent publication of a bear protection poster by Wildlife at Risk, an issue of educational bulletin by the Centre for Nature Education of Vietnam (ENV; Photo 8.2) and some brief radio and TV broadcasts on governmental policy for the control of captive bears.

Recommendations

Despite being protected by law, bears in Vietnam continue to be hunted for use and trade. The main reasons are not enough strong law enforcement, low public awareness on bear conservation, lack of a comprehen-

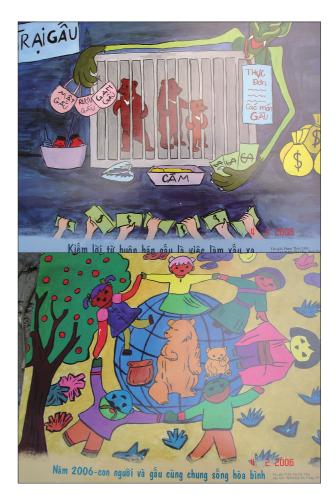


Photo 8.2: Drawings made by school pupils for a bear conservation contest conducted by the ENV organization. Messages on upper drawing: "Making benefit from bear trade is bad business" and on lower drawing: "Year 2006 is for peaceful coexistence of people and bears".

sive bear conservation action plan, and lack of investment for bear conservation activities. Conservation enforcement in Vietnam is conducted by forest rangers, border customs and market inspectors. The capacity of these forces is limited due to lack of relevant equipment, lack of relevant training on inspecting for bear parts and derivatives, and poor salaries (which opens the opportunity for corruption). Public education on bear conservation is still too weak. Especially in remote areas, people do not know the critical conservation status of the wild bear population, nor are they aware of national legislation on bear conservation. Meanwhile, their living standards are very low and the wildlife market strongly encourages them to hunt bears. Governmental investment for bear conservation is too low to solve these problems in a timely manner. For example, in the case of controlling illegal captive bears, the government lacked funds to pay for microchip implantation or to provide facilities to house confiscated bears.

Research on bears in Vietnam is also poorly developed due to lack of funds. Little is known about the size of Vietnam's bear population or distribution, or problems of habitat fragmentation, to say nothing of detailed studies of bear ecology. The country also still lacks a comprehensive bear conservation action plan, which would help to guide and mobilize all sources for bear conservation.

In order to conserve bear populations in Vietnam, the following actions are high priority:

- Strengthening law enforcement of bear hunting, trade and use, by increasing capacity of enforcement forces by providing them with relevant equipment, expertise training, applying of relevant incentives and punishment systems.
- (2) Developing a nation-wide campaign on not using bear parts and bear derivatives, requesting restaurants and pharmaceutical shops to halt trading in bear parts and bear derivatives.
- (3) Stronger education to increase public awareness of the urgency of bear conservation status and on national legislation for bear conservation.
- (4) Seeking funds for development of bear conservation-related studies such as assessment of current status of the bears in the wild, distribution, population size, population fragmentation, and threats to each sub-population and bear ecology.
- (5) Developing a national bear conservation action plan and having it approved by the government for funding its implementation.

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