



3. PRIORITY SPECIES AND RELATED CONSERVATION STRATEGIES

AMUR TIGER

The amur tiger (*Panthera tigris altaica*) is a rare subspecies of tiger (*P. tigris*). Also known as the Siberian, Korean, Manchurian, or North China tiger, it is the largest of all animals in the feline family Felidae.¹ It is considered 'Endangered' by IUCN/Special Survival Commission cat specialist group.²

Distribution and population³

Amur tigers total less than 500 in the wild, among which approximately 330-450⁴ were found in Primorsky Province of Russian Far-East in 2003, and 12-16 were found in China between 1998 and 1999 (Jilin Province, 7-9; eastern Heilongjiang Province, 5-7).⁵ There are very few in Manchuria (north-eastern China). The Democratic People's Republic of Korea was estimated to have fewer than 10.⁶

Approximately 95 per cent of the tigers in the Russian Far-East exist as a single, unfragmented population in the Sikhote-Alin-Wandashan Mountain Ecosystem in Primorski and Southern Khabarovski Krai. Tigers in the Wandashan Mountains of North-east Heilongjiang Province, China, are connected to the Sikhote-Alin meta-population via the Strelnikov Range in the Russian Federation. Other smaller, fragmented subpopulations are found along the Tumen River: in South-west Primorski Krai, and in Pogranichnaya Raion, North-western Primorski Krai, the Russian Federation; Hunchun and Wangqing Counties of Jilin Province, Southern and Northern Laoyeling Region, and the Zhangguangcailing Region of Heilongjiang.

The Strelnikov "ecological corridor" represents the single location where tigers from the large, Sikhote-Alin population can potentially move across international boundaries (figure 1 and figure 2).

The situation on the Korean Peninsula is less clear. Good ground survey is still in need to confirm the status of tigers in this area.

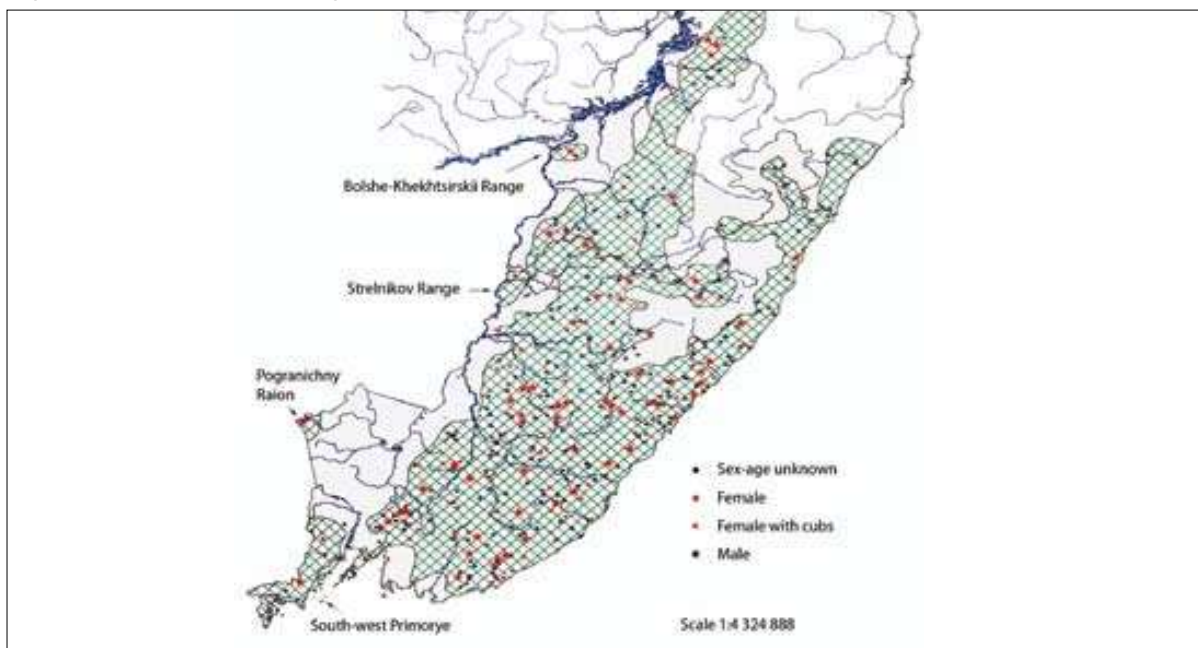
Physical features and habitats⁷

Weighing up to 350 kg, an amur tiger is differentiated from other tiger subspecies by its paler fur and dark brown stripes and diverse diet, 85 per cent of which is composed of ungulates such as red deer and wild boar. Therefore, protecting these and other prey animals from illegal hunting may be just as important to the tiger's survival as preventing direct killing of the big cats.

Caves and thick forests are their primary habitats. The habitat of the amur tiger (and leopard) is one of the most unique forests on earth. In the summer, the forests are dense and jungle-like in appearance, but in the winter, they are snow bound. Being the largest in the cat family, each adult tiger needs a huge area of land for its territory — up to 50 km by 50 km and able to move 80-90 km at night. It reaches its sexual maturity 4 years after birth and breeds once every 2 to 3 years. For each birth, 2 to 3 cubs can be produced. The cubs are weaned after about 45 days.

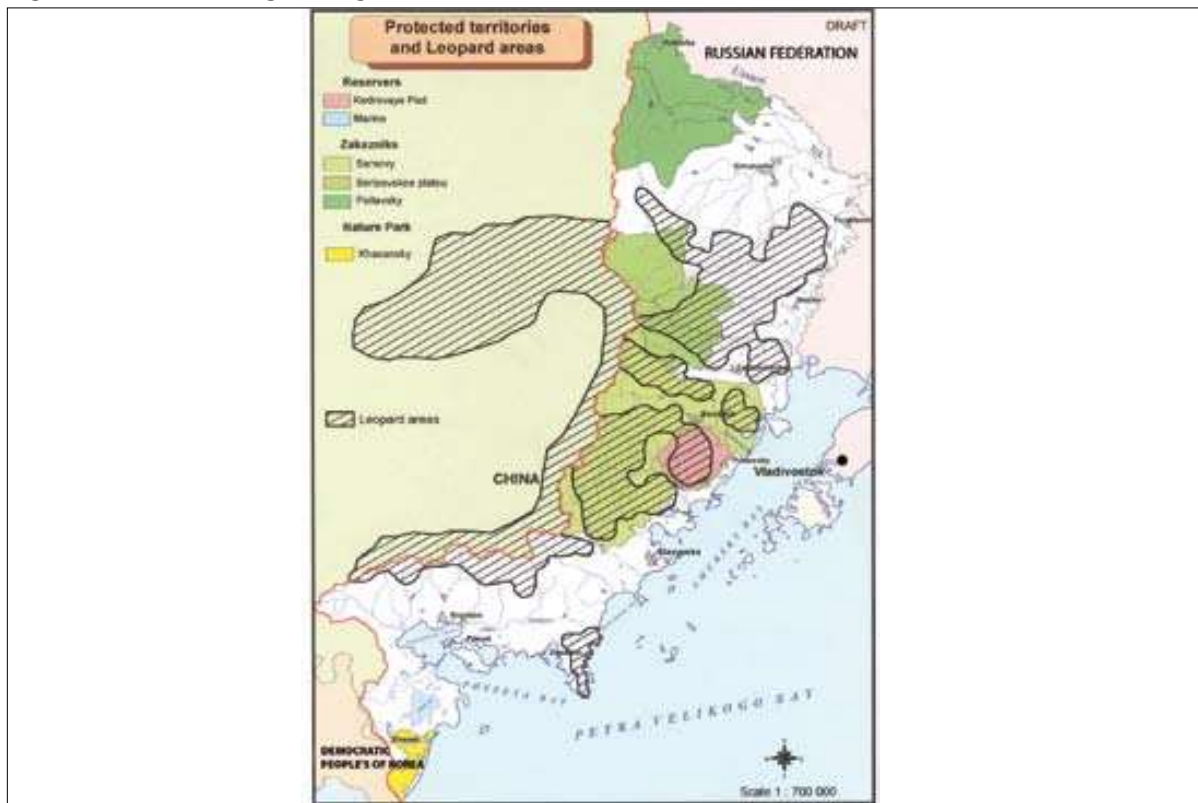


Figure 1: Distribution of tigers in the Russian Far-East



Source: Pikunov, Dmitrii and Dale Miquelle (2001) 'Conservation Amur Tigers and Far Eastern Leopards in the Tumen River Area North-east Asia', Wildlife Conservation Society, Vladivostok: Russian Far East Programme.

Figure 2: The amur tiger range in the borders of China and the Russian Federation



Source: UNDP, Korea National Commission for UNESCO (2004) Lower Tumen River Area Transboundary Biosphere Reserve Proposal.

Threats⁸

With the enlargement of human settlements, tiger population shrinkage is directly related to ever-expanding socio-economic needs of the humans.

1. Habitat loss and fragmentation

First and foremost, large areas of tiger habitat outside the protected areas system are increasingly vulnerable to indiscriminate logging and other imprudent uses. Unsustainable exploitation of forest outside the protected areas, such as increased logging and construction of roads has greatly reduced the hunting ground of tigers. Of late, forest fires have destroyed vast areas of forests in the Russian Far-East. Habitat deterioration in the middle and lower drainages of rivers has forced tigers to shift to the upper reaches of rivers and to adapt to more extreme conditions. Habitat loss and restriction would hamper the programme of reintroducing captive bred tigers, since lack of space to prowl and potential source of prey would exacerbate their chance of survival.

2. Poaching of tigers and their prey

Despite vigorous anti-poaching activities, illegal hunting and snaring of tigers persist due to the lucrative international market for tiger parts and products. In traditional Chinese medicine, tiger bone, made into pills, plasters, or other decoctions, remains in the modern traditional Chinese medicine for treating rheumatism. There also exists a commercial demand for non-medicinal parts of the tiger, most notably the skin, teeth and claws.

Large-scale hunting of red deer and wild boar by local hunters for game has also rendered tigers short of food, which indirectly affects their survival. In the best of the unprotected habitat, for each adult tiger or family of predators, there needs to be 250-300 ungulates as the absolute minimum allowable to assure normal living conditions for an adult tiger. Disruption of the normal food chain is the most important factor limiting the growth of tiger numbers in the Russian Far-East.

3. Inadequate law enforcement

While anti-poaching efforts are vigorous and apprehensions significant, the conviction rate of the offenders is reportedly very low. This is perhaps due to lack of any serious understanding of the implications of poaching and illegal wildlife trade within the judiciary.

Conservation strategy for the amur tiger

To overcome these threats, the following actions were identified as a NEASPEC priority for the conservation of amur tigers.



Objectives

- To increase prey species and enhance management of protected areas.
- To reduce poaching and illegal trade level.
- To strengthen state management, understandings and collaboration by local public.
- To enhance transboundary cooperation in protected areas management and trade control.

Priority actions for NEASPEC

1. Encourage and support two range countries to take appropriate actions to ensure healthy population of prey species, including:
 - a. Implement ban on hunting in key areas;
 - b. Development and implementation of a sustainable harvesting system in tiger habitats;
 - c. Development and implementation of the projects for restoring ungulate populations in tiger habitat, for example, removal of snares, assessment of effectiveness of several measures to increase ungulate numbers in model hunting estates, and dissemination of the experience.
2. Ensure law enforcement in each member country on both international and domestic trade of all tiger specimen, parts and derivatives, and encourage and support range countries to strengthen law enforcement, including:
 - a. Establishment of anti-poaching team and enforcement unit to counter the illegal killing and trade including monitoring of poaching;
 - b. Implement measures to ban transfer and trade of products with tiger ingredients and to prevent illegal possession and transportation of tiger specimen, parts and derivatives;
 - c. Reinforcement of operation of customs and border control on transboundary transfer of specimen, parts and derivatives in cooperation with customs offices of other countries;
 - d. Work closely with CITES secretariat and implement the resolution Conf. 12.5 in CITES on Conservation of and trade in tigers and other Appendix I Asian big cat species.
3. Encourage and support range countries to involve local public in planning and implementation of conservation work as well as local development to reflect their interest and needs, including:
 - a. Create sufficient compensation scheme (state insurance) for tiger kills of domestic animals;
 - b. Evaluate potential for supporting local community through sustainable use of natural resources in order to develop economic incentives for encouraging local people participation in conservation.
4. Encourage and support range countries to work together for conservation of the species, including:
 - a. Establish and operate national working group including government agencies, managers, researchers, NGOs and local public, where appropriate, in each range country, in order to evaluate and propose conservation measures;

- b. Facilitate regular dialogue with their international counterpart working groups to coordinate actions;
 - c. Launch Russian Federation-China transboundary reserves in Wandashan/Strel'nikov and Dalongling-Laoyeling/south-western Primorye;
 - d. Establish international and national corridors to secure safe movement of the species.
5. Encourage and support the Republic of Korea and the Democratic People's Republic of Korea to establish a joint working group to work on current status and conservation of the species.
 6. Promote awareness raising on conservation needs of the species in each Government as well as general public and international community by providing regularly updated information of conservation status and collaboration activities.
 7. Support range countries to work together in capacity-building on habitat management, population management, monitoring and research, law enforcement, environmental education and community development.
 8. Support the participation of NGOs in conservation activities.

