

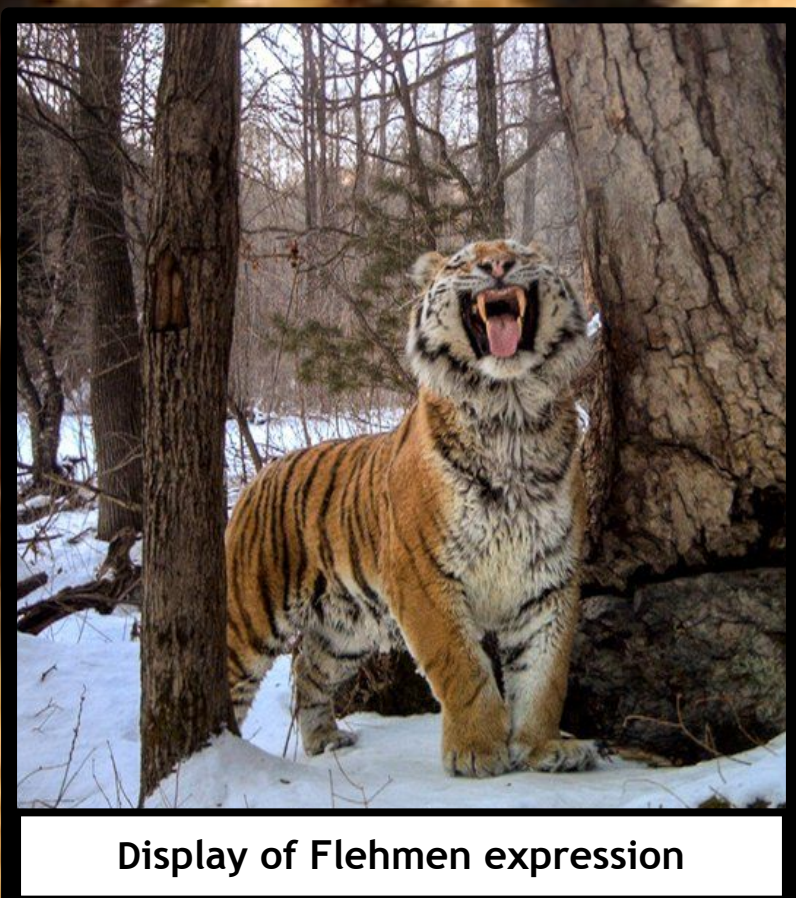
Amur Tiger

Panthera tigris altaica - "Siberian Tiger"

Christian Bower



Photo: University College London



Display of Flehmen expression

Behavior

Sociality: Very solitary, with most intraspecific interactions taking place during mating, and cub rearing

Communication

- **Vocalizations:** grunting, woofing, moaning, roaring, growling, snarling, hissing, purring, miaowing
- **Facial Expressions:** Flehmen, Defense threat (Corners of open mouth pulled back, exposed canines, flattened ears, enlarged pupils).
- **Marking:** Urine spraying and ground scrapes(visual/chemical detection). Mainly function in establishing and maintaining territorial boundaries

Reproduction: Females become very loud/noisy. Once Male is attracted mating begins, and lasts between 5-7 days. "Love scene" (including copulation) takes place dozens of times per day.



Form & Function

Size: May be largest living felid (debate between Tigers and African Lion) with Amur being largest tiger subspecies

- Males avg: 160-190 kg (~400 lbs), close to 3m long
- Females avg: 110-130 kg (~260lbs), around 2.5m long

Pelage: Distinct dark stripes over orange background, with lighter belly. Allows for concealment in a variety of habitats

- Generally lighter and denser in Amur tigers, which reflects their cooler climate, and snow habitats.

Form: Heavily built with large muscular forelimbs, and long powerful hindquarters

- Limited ability to pursue prey, but well developed for jumping
- Built for ambush, and to kill large prey items

Dentition:

- Dental Formula: 3/3, 1/1, 3/2, 1/1 (30 total)
- Large, conical, and posteriorly recurved canines. Largest of living felids, up to 74mm (almost 3 in)
- Large multiple rooted carnassials

Elastic Hyoid: Unique (to *Panthera* genus) allows for a "true roar" but limits ability to purr

- Located behind tongue and provides skeletal structure for the tongue, upper vocal tract and larynx
- Completely ossified in all other cat species



A tiger's impressive retractable claws



Female tigress "hugs" a large manchurian fir, likely leaving her own mark.

Range

Current: Limited to Russian far east, and the provinces of Primorye and Khabarovsk (95% in Sikhote-Alin Mountains)

- small isolated population (~20 individuals) exist in the East Manchurian (or Changbaishan) mountain system.

Historical: Throughout Northeast China and far east of Russia.

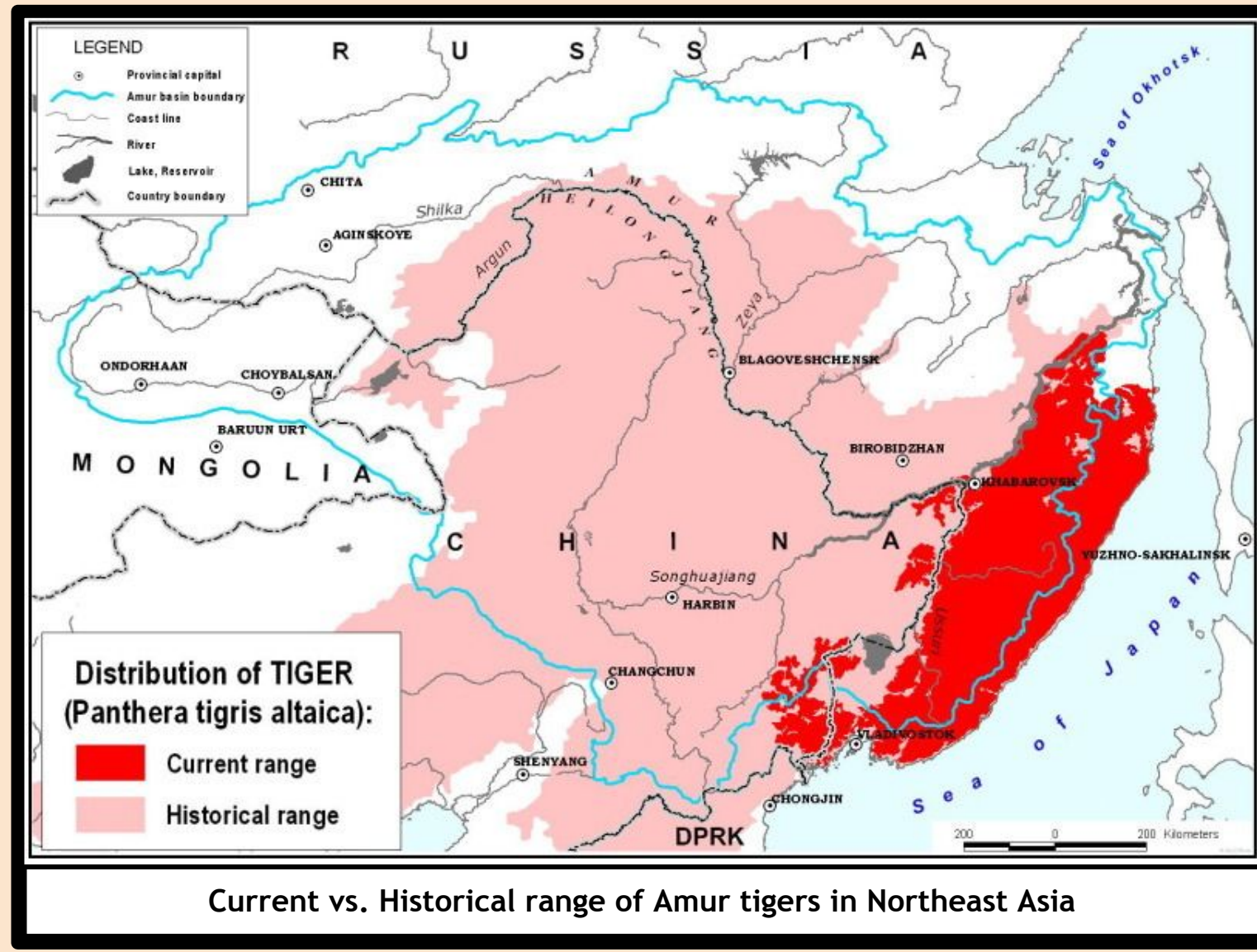
Available: Majority of high quality habitat on the chinese side of the East Manchurian mountains.

Habits: Very large territories due to the limited resources of northern ranges (2,000 - 4,000 km home ranges [up to 10,500 km]).

- Elevational range from 600 - 1600m
- Inhabit rocky, mountain slopes and river valleys
- Forests of Siberian pine or "cedar", mixed pine-oak, and/or dense shrubs.
- Commonly cover 15-20km per day (up to 60 km in Siberia and Manchuria regions)
- Highly directional travel patterns from one hunting area to next (use regular routes or beats).



Current Amur tiger distribution



Current vs. Historical range of Amur tigers in Northeast Asia

Conservation

- Tiger distribution is generally tied to their prey's, as prey is the main limiting factor in northern ranges
 - Management efforts should focus on prey habitat (especially red deer)
- The most important habitat to preserve seems to be river corridors
 - Allow for high prey densities (especially in winter)
 - Provide ample travel corridors
 - At greatest risk of fragmentation from human development



Photo: Sascha Fonseca

Large male Amur tiger caught on camera trap in the Russian far-east.

Diet

- Feed mainly on large ungulates
- Four main ungulate prey species: red deer, wild boar, sika deer, and roe deer (wild boar seems to be most common)
- Up to 14 other species (including both Black and Brown Bear!)