

# ENVIRONMENTAL LAW AND POLICY

Lecture 6. ENDANGERED SPECIES AND THE CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES)

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- Status: Critically Endangered
- Popuplation:
  fewer than 5000
- Scientific name:
  Diceros bicornis
- Height: 5.2 feet
- Weight: 1,760 –3,080 pounds
- Habitats: Tropical and Subtropical Grasslands, Savannas, Deserts and Xeric Shrublands



## **BLACK RHINO**



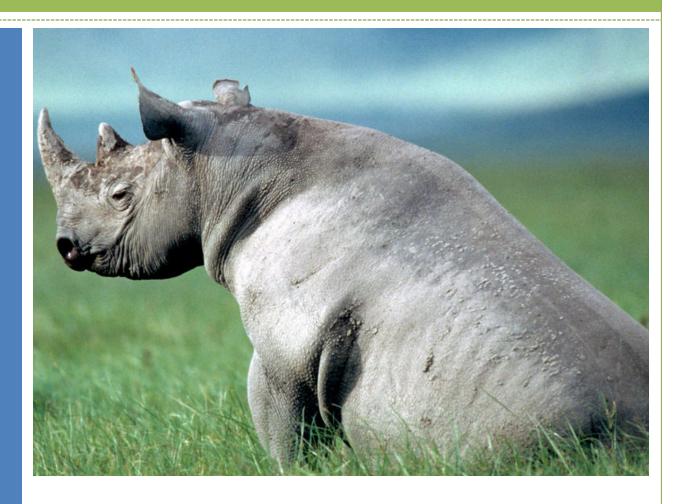
#### WHY THEY MATTER?



 Rhinos are one of the oldest groups of mammals, virtually living fossils. They play an important role in their habitats and in countries like Namibia, rhinos are an important source of income from ecotourism. The protection of black rhinos creates large blocks of land for conservation purposes. This benefits many other species, including elephants.



Habitat changes have contributed to population declines, but this is a secondary threat compared to poaching. In southern Zimbabwe, privately owned rhino conservancies have been invaded by landless people. This reduces the amount of safe habitat for two large black rhino populations and increases the risk of poaching and snaring.



## HABITAT LOSS



#### ILLEGAL WILDLIFE TRADE

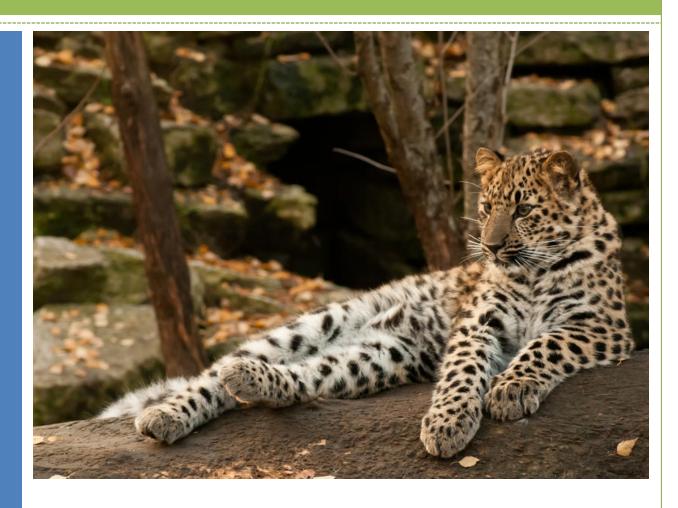


- Black rhinos have two horns, and occasionally a third small posterior horn. The front horn is longer than the rear which makes them lucrative targets for the illegal trade in rhino horn.
- Between 1970 and 1992, 96 percent of Africa's remaining black rhinos were killed. Political instability and wars have greatly hampered rhino conservation work in Africa, notably in Angola, Rwanda, Somalia and Sudan. This situation has exacerbated threats such as trade in rhino horn, and increased poaching due to poverty.
- Today, black rhinos remain Critically Endangered because of rising demand for rhino horn, which has driven poaching to record levels. The increase is driven by a growing demand from some Asian consumers, particularly in Vietnam, for folk remedies containing rhino horn. In 2014, a total of 1,215 rhinos were poached in South Africa – a 21 percent increase from the previous year.



- Status: Critically Endangered
- Popuplation:
   More than 60 individuals
- Scientific name: Panthera pardus orientalis
- Weight: 70 105 pounds
- Habitats:

   Temperate,
   Broadleaf, and
   Mixed Forests



## **AMUR LEOPARD**



#### ABOUT AMUR LEOPARD



- People usually think of leopards in the savannas of Africa but in the
  Russian Far East, a rare subspecies has adapted to life in the temperate
  forests that make up the northern-most part of the species' range.
   Similar to other leopards, the Amur leopard can run at speeds of up to
  37 miles per hour. This incredible animal has been reported to leap more
  than 19 feet horizontally and up to 10 feet vertically.
- The Amur leopard is solitary. Nimble-footed and strong, it carries and hides unfinished kills so that they are not taken by other predators. It has been reported that some males stay with females after mating, and may even help with rearing the young. Several males sometimes follow and fight over a female. They live for 10-15 years, and in captivity up to 20 years. The Amur leopard is also known as the Far East leopard, the Manchurian leopard or the Korean leopard.



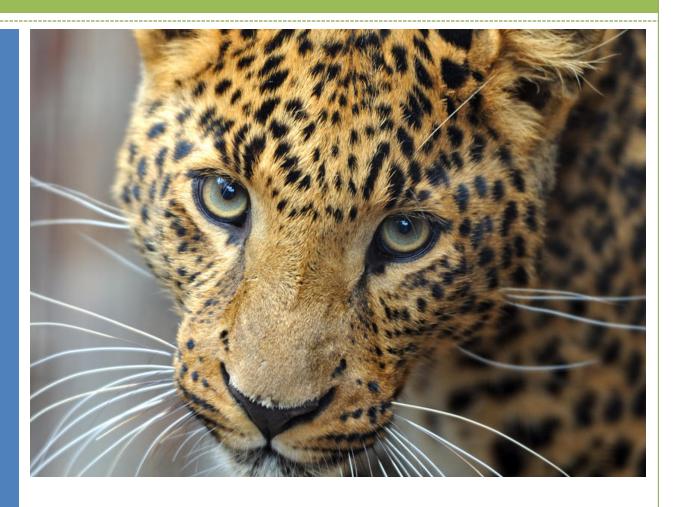
#### ABOUT AMUR LEOPARD



- Amur leopards are particularly vulnerable because of their preference for deer, a natural predatory preference, but dangerous in the Russian Far East due to direct human involvement. Farmers in the Russian Far East raise deer for human consumption and to produce antlers for the Asian medicine market.
- The prey base in the forests where Amur leopards live is insufficient for survival. Prey populations will recover if the use of the forests by the local people is regulated and if measures are taken to limit the poaching of hoofed species, the prey of the leopard.
- Recent video footage from a survey on a group of critically endangered
   Amur leopards in the Russian Far East has yielded unexpectedly positive
   results, giving evidence that some wild populations of the big cat are
   showing clear signs of a tendency towards growth.

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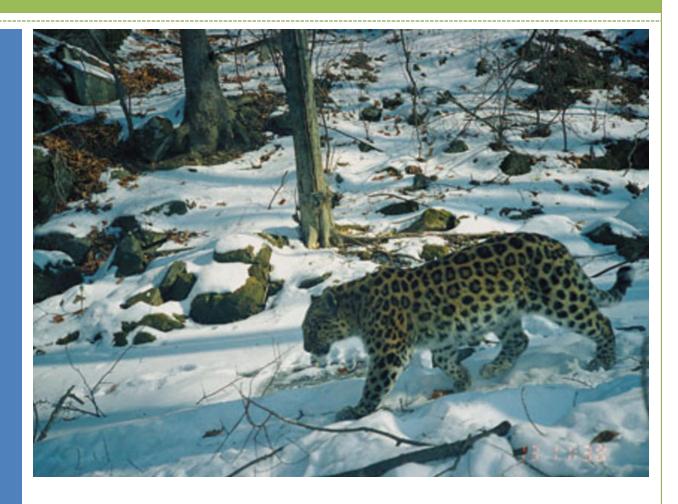
The Amur leopard is important ecologically, economically and culturally. Conservation of its habitat benefits other species, including Amur tigers and prey species like deer. With the right conservation efforts, we can bring them back and ensure long-term conservation of the region.



### WHY THEY MATTER?

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In China the prey base is insufficient to sustain large populations of leopards and tigers. Prey populations will recover if measures are taken to limit the poaching of prey species and the forests are managed for logging more sustainably. For the Amur leopard to survive for the long term, it needs to repopulate its former range. But for that to happen, prey populations need to recover first.



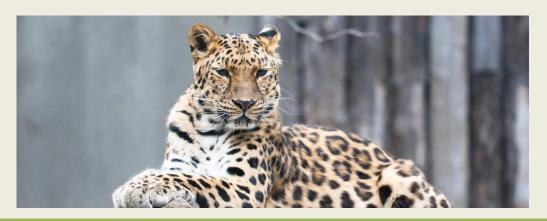
## PREY SCARCITY



#### ILLEGAL WILDLIFE TRADE



• The Amur leopard is poached largely for its beautiful, spotted fur. In 1999, an undercover investigation team recovered a female and a male Amur leopard skin, which were being sold for \$500 and \$1,000 respectively in the village of Barabash, not far from the Kedrovaya Pad reserve in Russia. Agriculture and villages surround the forests where the leopards live. As a result the forests are relatively accessible, making poaching a problem—not only for the leopards themselves, but also for important prey species, such as roe deer, sika deer and hare, which are hunted by the villagers both for food and cash.





- Status: Critically Endangered
- Popuplation: 104,700
- Scientific name: Pongo pygmaeus
- ❖ Weight: 66 220 pounds
- **♦ Height**: 3.3 4.6 feet
- Habitats:

   Lowland
   rainforests and
   tropical, swamp
   and mountain
   forests



#### **BORNEAN ORANGUTAN**



#### About BORNEAN ORANGUTAN



- Bornean orangutan populations have declined by more than 50% over the past 60 years, and the species' habitat has been reduced by at least 55% over the past 20 years.
- The Bornean orangutan differs in appearance from the Sumatran orangutan, with a broader face and shorter beard and also slightly darker in color. Three subspecies are recognized, each localized to different parts of the island:
  - Northwest Bornean orangutans are the most threatened subspecies.
     Its habitat has been seriously affected by logging and hunting, and a mere 1,500 individuals or so remain. Many habitat patches in the area are small and fragmented.
  - Northeast Bornean orangutans are the smallest in size and found in Sabah and eastern Kalimantan as far as the Mahakam River.
  - o Central Bornean orangutans are the subspecies with the most animals, with at least 35,000 individuals.



Orangutans play a critical role in seed dispersal, keeping forests healthy. Over 500 plant species have been recorded in their diet.

Orangutan numbers and distribution have declined rapidly since the middle of the 20th century, due to human activities. These include hunting, unsustainable and often illegal logging, mining, and conversion of forests to agriculture.



### WHY THEY MATTER?



#### ILLEGAL WILDLIFE TRADE



Young orangutans are in demand for a flourishing pet trade, with each animal fetching several hundred dollars in city markets on nearby islands. Studies have indicated that 200-500 orangutans from Indonesian Borneo alone enter the pet trade each year. This represents a real threat to wild orangutan populations as orangutans have an extremely low reproductive rate. There is also trade in orangutan parts in Kalimantan, with orangutan skulls fetching up to \$70 in towns.









- Status:Endangered
- Popuplation: Around 3,890
- Scientific name:
  Panthera tigris
- Weight: 220 660 pounds
- ❖ Length: 4 10 feet
- \* Habitats: Tropical rainforests, evergreen forests, temperate forests, mangrove swamps, grasslands and savannas



## **TIGER**



#### About TIGER



- After a century of decline, tiger numbers are on the rise. At least 3,890 tigers remain in the wild, but much more work is needed to protect this species that's still vulnerable to extinction.
- The largest of all the Asian big cats, tigers rely primarily on sight and sound rather than smell. They typically hunt alone and stalk prey. A tiger can consume up to 88 pounds of meat at one time. On average, tigers give birth to two or three cubs every two years. If all the cubs in one litter die, a second litter may be produced within five months.
- Tigers generally gain independence at two years of age and attain sexual maturity at age three or four for females and at four or five years for males. Juvenile mortality is high however—about half of all cubs do not survive more than two years. Tigers have been known to reach the age of 26 years in the wild.



#### About TIGER



- Males of the largest subspecies, the Amur (Siberian) tiger, may weigh up to 660 pounds. For males of the smallest subspecies—the Sumatran tiger—upper range is at around 310 pounds. Within each subspecies, males are heavier than females.
- Tigers are mostly solitary, apart from associations between mother and
  offspring. Individual tigers have a large territory, and the size is
  determined mostly by the availability of prey. Although individuals do
  not patrol their territories, they visit them over a period of days or weeks
  and mark their domain with urine and feces.
- Across their range, tigers face unrelenting pressures from poaching, retaliatory killings and habitat loss. They are forced to compete for space with dense and often growing human populations.



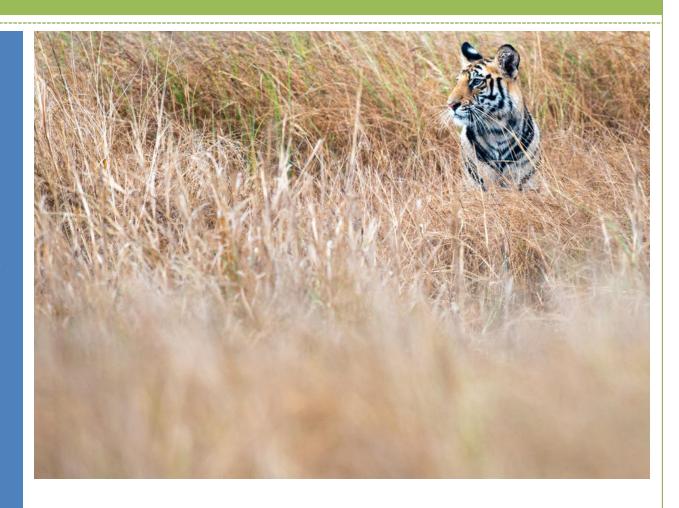
This big cat is both admired and feared by people around the world. If forests are emptied of every last tiger, all that will remain are distant legends and zoo sightings.



### WHY THEY MATTER?



Tigers have lost 93% of their historical range. Their habitat has been destroyed, degraded and fragmented by human activities.The clearing of forests for agriculture and timber as well as the building of road networks and other development activities pose serious threats to tiger habitats. Fewer tigers can survive in small, scattered islands of habitat, which leads to a higher risk of inbreeding and makes tigers more vulnerable to poaching.



## HABITAT LOSS

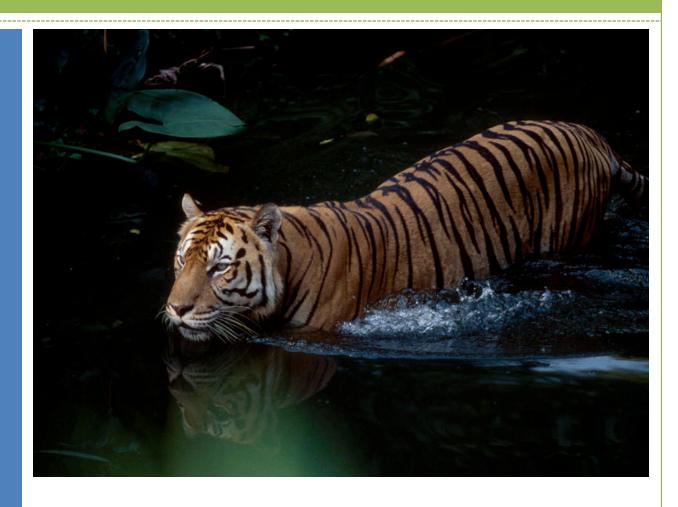
People and tigers increasingly compete for space. The conflict threatens the world's remaining wild tigers and poses a major problem for communities living in or near forests with tigers. As forests shrink and prey gets scarce, tigers are forced to hunt domestic livestock, which many local communities depend on for their livelihood. In retaliation, tigers are killed or captured.



#### **HUMAN WILDLIFE CONFLICT**



Trade in tiger parts and products is a major threat to wild tiger survival. Together with TRAFFIC, the global wildlife trade monitoring network, WWF implement strategies to stop wildlife criminal networks, help governments shut down black markets, and change consumer behavior.



#### **ELIMINATING TIGER TRADE**



#### POACHING AND ILLEGAL WILDLIFE TRADE



- Every part of the tiger—from whisker to tail—is traded in illegal wildlife markets. Poaching is the most immediate threat to wild tigers. In relentless demand, their parts are used for traditional medicine, folk remedies and increasingly as status symbols among some Asian cultures.
- There are usually limited resources for guarding protected areas in the countries where tigers live. Even countries with strong enforcement of tiger protection laws fight a never-ending battle against poaching. In Indochina and China, poaching is so pervasive that thousands of forest acres stand empty of tigers.
- The impact from the death of a single tiger at the hands of poachers reaches beyond one single loss. If a female tiger with cubs is killed, her cubs will likely die without their mother. Also, the female's potential for future breeding is lost. If a male is killed, his death can result in intensive competition for his territory among surviving males in the population, creating disruption in further breeding by those males.

## WILDLIFE



### **UNDER ENTINCTION RISKS**



#### **EXTINCTION RISKS**



- EXTINCT: No reasonable doubt that the last individual has died
- **EXTINCT IN THE WILD**: Known only to survive in cultivation, in captivity or as a naturalized population
- CRITICALLY ENDANGERED: Facing an extremely high risk of extinction in the Wild
- ENDANGERED: Facing a high risk of extinction in the Wild
- VULNERABLE: Facing a high risk of extinction in the Wild
- NEAR THREATENED: Likely to qualify for a threatened category in the near future
- **LEAST CONCERN:** Does not qualify for Critically Endangered, Endangered, Vulnerable, or Near Threatened

#### **About CITES**

CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.





#### **About CITES**

- Annually, international wildlife trade is estimated to be worth billions of dollars.
- The trade is diverse, ranging from live animals and plants to a vast array of wildlife products derived from them, including food products, exotic leather goods, wooden musical instruments, timber, tourist curios and medicines.
- Today, it accords varying degrees of protection to more than 35,000 species of animals and plants, whether they are traded as live specimens, fur coats or dried herbs.
- CITES was drafted at a meeting of members of IUCN in 1963. The text of the Convention was finally agreed on 3 March 1973, and on 1 July 1975 CITES entered in force.



#### **About CITES**

CITES is an international agreement to which States adhere voluntarily.

CITES provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level.

CITES has now 183 Parties.





#### How CITES works?



- CITES works by subjecting international trade in specimens of selected species to certain controls. All import, export, re-export and introduction from the sea of species covered by the Convention have to be authorized through a licensing system.
- Each Party to the Convention must designate one or more
   Management Authorities in charge of administering that licensing
   system and one or more Scientific Authorities to advise them on the
   effects of trade on the status of the species.
- The species covered by CITES are listed in three Appendices, according to the degree of protection they need.



#### How CITES works?



- Appendix I includes species threatened with extinction and for which trade must be subject to particularly strict regulations and only authorized in exceptional circumstances.
- 2. Appendix II species are not necessarily currently threatened with extinction but may become so unless trade is strictly regulated. Appendix II also contains so called 'look-alike' species, which are controlled because of their similarity in appearance to the other, regulated species, thereby facilitating a more effective control.
- 3. **Appendix III** includes species that are subject to regulation within the jurisdiction of a party and for which the co-operation of the parties is needed in order to prevent or restrict their exploitation.



#### The CITES species



- Roughly 5,600 species of animals and 30,000 species of plants are protected by CITES against over-exploitation through international trade.
   They are listed in the three CITES Appendices.
- The species are grouped in the Appendices according to how threatened they are by international trade. They include some whole groups, such as primates, cetaceans (whales, dolphins and porpoises), sea turtles, parrots, corals, cacti and orchids.
- However, in some cases only a subspecies or geographically separate population of a species (for example the population of just one country) is listed.



### The CITES species



	Appendix I	Appendix II	Appendix III
FAUNA			
Mammals	300 spp. (incl. 11 popns) + 23 sspp. (incl. 3 popns)	501 spp. (incl. 16 popns) + 7 sspp. (incl. 2 popns)	45 spp. + 10 sspp.
Birds	154 spp. (incl. 2 popns) + 10 sspp.	1278 spp. (incl. 1 popn) + 3 sspp.	25 spp.
Reptiles	80 spp. (incl. 8 popns) + 5 sspp.	673 spp. (incl. 6 popns)	40 spp.
Amphibians	17 spp.	126 spp.	3 spp.
Fish	16 spp.	87 spp.	-
Invertebrates	63 spp. + 5 sspp.	2162 spp. + 1 sspp.	22 spp. + 3 sspp.
FAUNA TOTAL	630 spp. + 43 sspp.	4827 spp. + 11 sspp.	135 spp. + 13 sspp.
FLORA	301 spp. + 4 sspp.	29592 spp. (incl. 162 popns)	12 spp. (incl. 2 popns) + 1 var.
GRAND TOTAL	931 spp. + 47 sspp.	34419 spp. + 11 sspp.	147 spp. + 13 sspp. + 1 var.



#### How is CITES financed?



- The core administrative costs of the Secretariat, the Conference of the Parties and its subsidiary bodies, the Standing Committee and the other permanent committees, are financed from the CITES Trust Fund.
- This Trust Fund is replenished from contributions from the Parties to the Convention based on the United Nations scale of assessment, adjusted to take account of the fact that not all members of the United Nations are Parties to the Convention. The scale of contributions to the Trust Fund for 2014-2016 is shown in <u>Annex 4</u> to Resolution Conf. 16.2.



#### In-class discussion



- Choose a specific endangered species and identify their extinction risk and some of their properties.
- Introduce a trade regulation of a specific country to practice CITES.
- → You have 15 minutes to prepare and 5 minutes to present your findings.

### **THANK YOU**



### ANY QUESTION?