Born to Be Wild

Saving the Majestic Tiger

“Wild tigers are in trouble. Together, we can save them.”

– Leonardo DiCaprio

IFAW.org
International Fund for Animal Welfare
Learning Objectives
The lessons in this program meet learning objectives in science, social studies, and language arts. Among other program goals, students will learn life science concepts and vocabulary, practice purposeful reading and comprehension strategies, and conduct a debate activity based on points of view from a simulated news article. See the standards charts at the end of this guide for more specific correlations. (See next pages for detailed standards charts for grades 3-4.)

Resources
Key Content Pages
1. Born to Be Wild: Why Tigers Matter
2. Tigers Under Threat
3. Focus Country: India
4. Focus Country: China
5. Focus Country: Russia/Extinction Is Forever
Big Cats Chart
Glossary
Lesson Plans & Worksheets
- Lesson 1: Video Viewing/Reading Key Content
- Worksheet 1: Graphic Organizer
- Worksheet 2: Video Quiz
- Lesson 2: Creating a Tiger Food Web
- Lesson 3: Identifying Threats and Responses
- Worksheet 3: Threats and Responses Chart
- Lesson 4: Debating Tiger Farms
- Worksheet 4: Fictitious News Article
- Chart: Other Big Cats Around the World
- Worksheet 5: Big Cat Comparisons
Companion DVD
The educational video runs for approximately 15 minutes and is appropriate for general youth audiences. The DVD also includes PDF documents of all program materials, plus supporting resources.

Online
- Fun animal activities, fact sheets, photos, and more: http://www.ifaw.org/discoveranimals
- Global Tiger Initiative: http://www.globaltigerinitiative.org/
- International Tiger Coalition: http://www.endtigertrade.org/
- Earn Your Stripes (interactive extension activities): http://www.ifaw.org/animalaction

Animal Action Education
Each year, the International Fund for Animal Welfare (IFAW) launches a new thematic education program focusing on animals and the environment.

Free educational materials are locally adapted for free distribution in 15 countries, reaching some 5,000,000 young people worldwide each year. All of the resources for this program and others are available online at ifaw.org/education.

For more information about IFAW and the Animal Action education program, email info@ifaw.org or call 1-800-932-4329.

How to Use This Program

Born to Be Wild: Saving the Majestic Tiger aims to educate students about the characteristics of wild tigers, the threats to their survival, and the actions people are taking to save tigers and their habitats worldwide. Here’s one possible approach to teaching this program:

1. Introduce Topic & Develop Content Knowledge
   Video (on DVD), Video Quiz Worksheet, Lesson Plan 1, Graphic Organizer Worksheet

   A. Video viewing
   View the video with class to build background and tap into students’ prior knowledge about tigers. Students use a Graphic Organizer Worksheet to record their thinking as they view the video, jotting down key points, important vocabulary, and questions they have. Following the viewing, students may discuss their ideas in groups. They may also take the short Video Quiz.

   B. Read Key Content Pages
   Use suggestions from Lesson 1 to prepare students to read the Key Content pages in this guide. During reading, students may use the Graphic Organizer worksheet for guidance.

2. Conduct Lesson Activities
   Teaching Guide: Key Content Pages, Lesson Plans & Worksheets 2-5
   Lesson 2 focuses on scientific concepts introduced on Key Content Pages 1-3; Lesson and Worksheet 3 guide students to consider the key threats and conservation activities introduced on Key Content Pages 1-5; Lesson and Worksheet 4 outline a debate activity for students to examine points of view on the issue of tiger farming in China using a fictitious news article and Key Content Page 4. Lesson and Worksheet 5 explore conservation status and comparisons among other big cats worldwide.

3. Extend Learning & Take Action
   Use the extension suggestions with each lesson as homework or extra projects to reinforce learning. There’s also a multi-media Interactive Magazine on the companion DVD, perfect for whiteboard or individual student exploration. Younger students may enjoy some fun tiger crafts and learning activities on the Tigers Activity Sheet.
   Suggestions for individual and group action on wild tiger issues can be found in the supplemental Take Action flyer. Bring parents on board for the Think Twice! Family Pledge. Take part in our Family Pledge to receive free tiger gifts for your entire class or group! For more information, see our Take Action flyer or visit ifaw.org/animalaction.

Ground Rules Activity
Prior to discussions that may involve strong views or feelings, many teachers and students like to develop ground rules within their classrooms to promote positive listening, respect, and sensitivity to different points of view.

Ask the class to pair up and answer the following question: “How do people behave toward me that makes me feel confident and comfortable to talk with them about things that really matter to me?”

Ask the pairs to move into groups of six and share their ideas. Have them make a list of the behaviors that all six can understand and agree with. These may include:

1. They listen to me.
2. They don’t laugh.
3. They don’t shout what I say to other people.

Gather the whole class and ask each group to report their list—one behavior at a time. Check for understanding and agreement with the whole class. Only write down those that everybody accepts and understands.

Steer the group toward identifying clearly observable behaviors rather than broad concepts. Display the list as a means to encourage individuals to take responsibility for their actions within the group.
# English/Language Arts

1. **Reading for Perspective**  
Students read a wide range of print and nonprint texts to build an understanding of texts, themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment.

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<th>Lesson</th>
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3. **Reading Strategies**  
Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts.

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4. **Communication Skills**  
Students adjust their use of spoken, written, and visual language to communicate effectively with a variety of audiences and for different purposes.

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5. **Communication Strategies**  
Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

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6. **Apply Knowledge**  
Students apply knowledge of language structure, language conventions, media techniques, figurative language, and genre to create, critique, and discuss print and nonprint texts.

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7. **Research Skills**  
Students conduct research on issues and interests by generating ideas and questions and by posing problems. They gather, evaluate, and synthesize data from a variety of sources to communicate their discoveries in ways that suit their purpose and audience.

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8. **Synthesize Information**  
Students use a variety of technological and information sources to gather and synthesize information and to create and communicate knowledge.

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# Science

1. **Science as Inquiry**  
Students should develop:
* the abilities necessary to do scientific inquiry
* understandings about scientific inquiry

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3. **Life Science**  
Students should develop an understanding of:
* structure and function in living systems
* reproduction and heredity
* regulation and behavior

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• These standards are well covered by the lesson.  
✓ These standards are touched on in the lesson.
### Born to Be Wild: Saving the Majestic Tiger

#### U.S. Standards Correlation—Advanced Reader (continued)

<table>
<thead>
<tr>
<th>6. Personal and Social Perspectives</th>
<th>Lesson</th>
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<tbody>
<tr>
<td>Students should develop an understanding of:</td>
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<tr>
<td>• personal health</td>
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<td>• populations, resources, and environments</td>
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<td>• natural hazards</td>
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<td>• risks and benefits</td>
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<td>• science and technology in society</td>
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#### Geography

<table>
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<tr>
<th>5. Environment and Society</th>
<th>Lesson</th>
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<tr>
<td>Students should understand:</td>
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<td>• how human actions modify the physical environment</td>
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<td>• how physical systems affect human systems</td>
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<tr>
<td>• the changes that occur in the meaning, use, distribution, and importance of resources</td>
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<tr>
<th>6. The Uses of Geography</th>
<th>Lesson</th>
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<td>Students should understand how to apply geography to interpret the past and the present and to plan for the future.</td>
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#### Technology

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<th>1. Creativity and Innovation</th>
<th>Lesson</th>
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<tbody>
<tr>
<td>Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.</td>
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<tr>
<th>2. Communication and Collaboration</th>
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<tr>
<td>Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.</td>
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<tr>
<th>3. Research and Information Fluency</th>
<th>Lesson</th>
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<tbody>
<tr>
<td>Students apply digital tools to gather, evaluate, and use information.</td>
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<tr>
<th>4. Critical Thinking, Problem Solving, and Decision Making</th>
<th>Lesson</th>
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<tr>
<td>Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.</td>
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</table>

 ✓ These standards are well covered by the lesson.  • These standards are touched on in the lesson.

### Sources:

**English/Language Arts Standards (K–12)**
From the International Reading Association and the National Council of Teachers of English
http://www.ncte.org/standards

**Science Standards (5–8)**
From the National Academies of Science and Project 2061 (from the American Association for the Advancement of Science)
http://www.nap.edu/catalog.php?record_id=4962

**Geography Standards (K–12)**
From the National Geographic Society

**Technology Standards (K–12)**
From the International Society for Technology in Education
Tigers are among the most striking and unique animals on the planet. The largest of all cats, tigers are remarkably well-adapted to survival in the wild.

Their distinctive black stripes have patterns as unique to individuals as fingerprints. The stripes create camouflage that is ideally suited to the forests and grasslands where most wild tigers live. The fur without stripes is a tawny reddish-orange color (or white on the body’s underside), but if you shaved it all off, the tiger’s dark stripes would remain on its skin.

Many cultures have long revered tigers as icons of beauty, charm, luck, and power. Tiger images appear in Stone Age cave paintings in India and in many temples and shrines throughout Asia. And the tiger is one of the twelve animals in the Chinese zodiac.

Quite simply, tigers matter because they exist. Tigers are an important part of the planet’s rich diversity of life. As top predators in their food webs, they feed on a variety of prey species and help maintain the structure and functioning of the ecosystems they inhabit. Tigers, therefore, are considered a keystone species. If tigers disappear, there will be far-reaching and negative consequences for other parts of the ecosystem. This means that protecting tigers helps many other species as well.

Yet, with just a few thousand tigers remaining in the wild, these iconic and ecologically important animals are dangerously close to vanishing from the earth.

Eight subspecies* of tigers once roamed across Asia, adapting to a variety of habitats from the cold woodlands of the Russian Far East to the varied grasslands and forests of India and the tropical jungles of Indonesia. Tigers now live in scattered groups in a small fraction of their original range.

Tiger habitats must include three key components: dense vegetation for cover, access to water, and sufficient large, hoofed animals to serve as prey. Their main food sources are different types of deer and wild pigs, but tigers may also eat birds, monkeys, reptiles, and fish, as well as young elephants and rhinos.

*Scientists have traditionally reported eight subspecies; an alternative classification system of division brings the total to nine.
In the twentieth century, three subspecies of tiger disappeared: the Caspian tiger from Central Asia, and the Bali tiger and Javan tiger from Indonesia. The South China tiger may also be extinct in the wild. All surviving tiger subspecies (Amur, Bengal, Indochinese, and Sumatran) are endangered, and some are critically endangered. Researchers estimate that as few as 3,000 tigers remain in the wild—mostly Bengal tigers.

Tigers are at risk for several reasons. One is the rapid disappearance of their habitat as human populations grow. As wild lands are replaced by houses, roads, farms, and logging operations, wild tigers are forced to live in small “islands” of habitat without links or corridors. This process, called habitat fragmentation, causes survival stresses that can lead to extinction.

Another threat to wild tigers is the loss of their prey animals due to wildlife hunting in and around tiger habitat. Without food, tigers may wander into villages to prey on livestock. This interaction is often lethal for both people and tigers.

The most direct and menacing threat to wild tigers is the illegal trade for their body parts. Tigers are poached—illegally shot, trapped, or poisoned—because some people will pay high prices for tiger bones, skins, meat, and other body parts.

IFAW protects dwindling wild tiger populations from poaching, illegal trade, and habitat loss. It also rescues orphaned tiger cubs to give them second chances at life in the wild.

Tigers in Captivity

While there may be as few as 3,000 tigers left in the wild, thousands more are kept in captivity around the world. In China, some 6,000 tigers are kept by a few large tiger farms that breed for the trade of tiger parts and products (see page 4). In the U.S. alone, there are between 5,000 and 10,000 captive tigers. Most are privately owned, often living in cramped and miserable conditions along roadsides and in backyard-breeder facilities, circus wagons, and private homes. Many were purchased as exotic pets when they were cubs. But these cubs don’t stay cute for long. In just six months, they can inflict a deadly bite. By three years old, they can become aggressive—and owners can’t keep up with their needs. They can’t be released to the wild because they lack the skills needed to survive.
Focus Country: India

More wild tigers live in India than anywhere else in the world. In 1900, roughly 40,000 tigers lived there. However, their numbers dropped sharply as the century progressed, largely due to sport hunting. In 2009, as few as 1,411 tigers were left in India.

Tiger shooting was banned in India in 1970, and two years later, the Wildlife Protection Act passed. In 1973, the government of India launched Project Tiger to save its remaining tigers, and this project quickly established nine large forested areas as tiger reserves.

Each reserve had a core area that was protected from human disturbance. Land managers worked to repair any previous disturbance so the habitats could return to their natural state as much as possible. The number of tiger reserves in India had grown to 37 by 2009.

In addition to suitable habitat, wild tigers need protection from poaching in order to survive and thrive. Because tiger poaching has been a problem at some of the reserves, thousands of wildlife guards now defend tigers from poachers. Guards also work along India’s borders to combat illegal smuggling of tiger parts to other countries. Project Tiger has also raised local support for conservation issues, and its work to protect tiger habitats has helped to protect human habitats. Its efforts have reduced erosion, stabilized ecosystems, and encouraged wise land use.

Tiger conservation in India has demonstrated that what’s good for tigers is often good for everyone.

Climate Change

Climate change is endangering the habitat of one of the largest remaining groups of wild tigers. Rising sea levels—caused by melting ice and other factors—threaten to destroy the mangrove forests of the Sundarbans, a coastal area along India’s border with Bangladesh. Researchers predict that if greenhouse gas emissions aren’t limited quickly, 96 percent of this tiger habitat will disappear in the next 50 to 90 years. Without sufficient habitat, the tigers will disappear as well.

The dark green area on this satellite image shows the Sundarbans, a protected mangrove forest system that is important tiger habitat. This protected area, which stands out sharply from the lighter-colored farmlands around it, is less than one meter (3.28 feet) above sea level in most places.
**Focus Country: China**

China is a land of great significance for tigers. Experts believe that the South China tiger subspecies is descended from the earliest of all tigers, which originated in China two million years ago. Even as recently as half a century ago, four subspecies and thousands of wild tigers roamed the country.

China is also the center of a modern controversy over tigers—because of the number of tigers kept on farms, which breed them for trade in their parts. Fewer than 50, if any, wild tigers remain alive in China today. But more than 6,000 captive tigers live on tiger farms. People breed them to make tiger-bone wine—marketed as “health tonic”—and other products.

The living conditions on tiger farms are often harsh. Tigers are used to roaming large areas of land, but in farms they’re confined to small cages. Cubs are separated from their mothers at three months old—instead of three years old in the wild—so the mothers can breed again quickly to produce more tigers for the farms.

There has been a ban on buying and selling tiger parts in China since 1993. And an agreement signed by most of the world’s nations aims to protect tigers by ensuring that international trade does not threaten their survival. Still, tiger farming is stimulating the demand for tiger parts, even though it is illegal to buy and sell them. This is a problem not just for the tigers on the farms but also for wild tigers everywhere because people who use tiger products would rather have them made from wild tigers than from farmed tigers (they believe wild tigers are stronger). A wild tiger sold for its parts can fetch as much as US$50,000 on the black market, making the illegal killing of wild tigers very profitable.

Meanwhile, conservation groups continue to push for strengthened laws and improved law enforcement in order to drive down the demand for tiger parts.

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**Tigers and Traditional Medicine**

In many Asian cultures, traditional beliefs say that certain tiger body parts have healing properties. People who practiced traditional Chinese medicine (TCM) used to put tiger bone in medicine to treat certain illnesses. In the wake of global concern about tiger survival, however, the TCM community has actively worked to find and promote alternatives to tiger parts in medicine. While the mainstream TCM community no longer supports the use of tiger bone, tiger-farming businesses promote the use of tiger bone soaked in wine as a health tonic, perpetuating the myth about tigers’ healing powers.

Although tiger-farm promoters argue that tiger parts are used in traditional medicine, the traditional medicine community has stated that there are effective replacements for tiger ingredients.
Tiger Cub Rescued

Thanks to the efforts of IFAW and other conservation groups, a young orphaned tiger (like the one above) recently received a second chance. The cub, which wandered into a Russian village in March 2009 in a weakened condition, was not expected to survive. Tiger specialists captured it and turned it over to the daily care of a rehabilitation team. The cub recovered as a result of a special diet and training to restore its natural hunting skills and healthy fear of humans. It was released in a nature preserve in September 2009. Most orphaned Amur tiger cubs that are rescued lack the skills for life in the wild and must remain in captivity. This lucky cub was only the second to be able to return to a life of freedom.

Focus Country: Russia

Amur tigers (also known as Siberian tigers) once ranged across the Russian Far East, into China, and down the Korean Peninsula. By the 1940s, they were hunted to a small corner of the Russian Far East. Conservation efforts saved them from extinction, and the population slowly grew, but the tigers again fell into extreme decline in the early 1990s. The reasons? The collapse of the Soviet Union had resulted in weakened law enforcement along Russia’s border with China, and the demand for tiger body parts in China encouraged poaching of tigers in Russia. Poachers could easily smuggle tiger parts across the border.

In 1994, the Russian government, along with several conservation groups, established six anti-poaching teams. The results were remarkable. Tiger losses dropped from 60 to 70 per year during the early 1990s to 13 in 1995 and 18 in 1996. The number of Amur tigers stabilized through a combination of law enforcement and a ban on the sale of tiger products. The government raised the penalty for poaching a wild tiger from roughly US$50 to US$20,000.

In spite of these efforts, Amur tigers are still in trouble. A 2008–2009 winter tiger survey found an overall population decline of 30 percent, which means there are fewer than 300 to 400 tigers left in Russia. Along with declines in tigers’ prey animals, poaching is still a problem in the Russian Far East. So anti-poaching teams remain crucial. They work to detect, prevent, and discourage tiger poaching. They also enforce wildlife laws, identify smuggling routes, and keep an eye on illegal trade. Other efforts in the region include educating schoolchildren about tiger conservation and encouraging public support of tiger protection.

Extinction Is Forever

Wild tigers are in crisis, and their extinction looms far too close to be ignored. Tigers have disappeared from vast areas of their original habitat, with their numbers dropping from around 100,000 in the early 1900s to as few as 3,000 today.

Government commitments to action plans for conserving wild tigers in all the countries where tigers live are reasons for hope. People must work together to protect tiger habitat, eliminate poaching, combat illegal trade, and reduce the demand for tiger parts for these magnificent wild animals to be saved.
## Other Big Cats Around the World

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<thead>
<tr>
<th>Cat Name</th>
<th>Conservation Status Notes*</th>
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<tbody>
<tr>
<td>Lion (Panthera leo)</td>
<td>• “Vulnerable”: estimated 10,000–23,000 lions in Africa</td>
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<td>• Used to live in most parts of Africa; now found only in the southern Sahara Desert and parts of southern and eastern Africa</td>
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<td>• Historically found in Africa and from Greece through Middle East to northern India</td>
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<td>• Asiatic lion, a subspecies, is critically endangered; fewer than 400 remain in India</td>
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<tr>
<td>Jaguar (Panthera onca)</td>
<td>• “Near Threatened”: unknown number in South America, Central America, southwestern United States</td>
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<td>• South America’s largest cats; once roamed throughout South and Central America</td>
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<td>• Today, significant numbers found only in remote parts of South and Central America—particularly in Amazon basin; rare sightings near Mexico–U.S. border</td>
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<tr>
<td>Leopard (Panthera pardus)</td>
<td>• “Near Threatened”: unknown number in Africa and Asia</td>
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<td>• No other wild cat has such a widespread range and diverse prey base, but leopard still under threat in many regions</td>
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<td>• Once common in all parts of Africa except Sahara Desert</td>
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<td>• Now gone from most parts of northern Africa, apart from a few areas of Atlas Mountains; extremely scarce in western Africa</td>
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<td>• Southeast Asia and India threats: hunting, habitat loss</td>
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<td></td>
<td>• Several subspecies once common in Middle East now all but extinct; Korean leopard, also known as Amur leopard, extremely rare in wild</td>
</tr>
<tr>
<td>Cheetah (Acinonyx jubatus)</td>
<td>• “Vulnerable”: estimated 7,500–10,000 cheetahs remain in Africa and Iran</td>
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<td>• Has disappeared from huge areas of historic range; still occurs widely, but sparsely, in Africa (disappearing from 76 percent of African range)</td>
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<td>• In Asia, has lost almost all of vast historic range, which within last century extended from shores of the Mediterranean and Arabian Peninsula to northern shores of Caspian and Aral Seas and west into central India</td>
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<td>• Asiatic cheetah now known to survive only in Iran</td>
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<tr>
<td>Snow leopard (Panthera uncia)</td>
<td>• “Endangered”: about 4,000–6,500 snow leopards in the wild, worldwide</td>
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<td>• Range now restricted to high mountains of Central Asia</td>
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<td>• Require large, low-density habitats</td>
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<td></td>
<td>• Experts suggest snow leopard population declined at least 20 percent over past two generations (16 years)</td>
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<td>• Main threats are poaching for illegal trade, conflict with local people</td>
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<td>• Snow leopard is tiger’s closest cat cousin</td>
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<tr>
<td>Mountain lion, or Puma (Puma concolor)</td>
<td>• “Least Concern”: around 30,000 in North American West, Central and South America</td>
</tr>
<tr>
<td></td>
<td>• Largest of any land-based mammal in Western Hemisphere</td>
</tr>
<tr>
<td></td>
<td>• Eliminated from eastern half of North America within 200 years of first European colonization</td>
</tr>
<tr>
<td></td>
<td>• Endangered subspecies persists in Florida; records of pumas in northeastern Canada and the eastern U.S. rising</td>
</tr>
<tr>
<td></td>
<td>• Florida panther, a subspecies, critically endangered; fewer than 100 remain</td>
</tr>
</tbody>
</table>

*Conservation status according to the IUCN Red List of Threatened Species. See www.iucnredlist.org for more.
Glossary

ailments*: sicknesses, injuries, or other signs of poor health
black market*: a system of illegal buying and selling
conference*: a meeting
conservation*: the protection and careful use of something, such as a natural resource or species
ecosystems: interacting communities of plants, animals, and the nonliving components of the environments in which these plants and animals live
endangered: in danger of dying out completely
extinct: no longer living or existing (as in a species that no longer exists on Earth)
food webs: diagrams that show how energy moves between living things in an ecosystem as the living things eat one another
habitat fragmentation: the process of breaking up a habitat into smaller and more disconnected patches, which often happens when humans build roads and homes, farm and log forests.
keystone species*: species that strongly affect the structure and function of an ecosystem
law enforcement: activities that ensure that laws are followed
legalization*: the process of making some activity legal
opposing: disagreeing with, or arguing against, a different viewpoint or practice
poached: hunted or taken illegally
smuggle: to bring materials across a border illegally
tiger reserves: areas of land where tigers are protected

*These words only appear in the Advanced Reader Edition of Born to Be Wild.
Main Learning Outcomes: Students will make connections to a text (and/or video), organize thinking using a graphic organizer, and expand understanding of content and vocabulary related to tigers.

A. Viewing the Video
Before/During Viewing
1. Help students make connections to prior knowledge by having them each turn to a partner and talk for a minute about what they know about tigers.
2. Show the video straight through.
3. After viewing, ask students if they learned any new information about tigers.
4. Create a large graphic organizer on chart paper or on an overhead transparency.

B. Reading the Content Pages
Before/During Reading
1. Make a copy of the graphic organizer template (Worksheet 1) for each student.
2. Choose the way to read the text that is best suited to the reading level of students:
   - Read the text aloud as students follow along. Model finding the key concepts and recording them on the class graphic organizer.
   - Pair good readers with less-able readers. Have them read and discuss the text together, stopping as they read to write responses on the graphic organizer.
   - Ask students to independently read the text, recording their ideas on their graphic organizers as they read.
   - Use the adapted version of the text for younger readers to read by themselves or with a partner. Or, read it to them. Either model how to complete the graphic organizer individually or complete the group organizer together.

After Reading
4. After students have read the text, use the discussion questions provided in each lesson to help students consolidate their understanding of the text.
5. Ask students to share their notes from their graphic organizers with the class. Record their ideas on the group graphic organizer.

Vocabulary Development
1. Word Highlights: Have students use different colors to highlight the words on their graphic organizers that they are able to explain to a partner.
2. Word Experts: Make pairs of students responsible for a word. They can teach the class about the word using chart paper or an overhead transparency.

Word: ____________________
Describe the word: _____________________
____________________________________
Draw the word:

Extending the Activity
(for advanced readers)
Assign different pages to different groups. Ask each group to read and discuss the pages, and record ideas on a group graphic organizer. Encourage students to look for additional information about their topic in the library and in online references. Ask each group to share their understandings with the class.
Worksheet 1: Reading/Viewing Guide

Name ______________________________________________________________________ Date: ___________________________________

Directions: As you view the video and read or listen to information about tigers, jot down the key ideas that you want to remember. List important vocabulary words and write questions that you have.

What I Know

Tigers

Key Ideas

Questions

Key Words

What I Know

Born to Be Wild
What have you learned from the film you just watched? Answer the questions below.

1. How many wild tigers are thought to exist in the world today?
   - a) about 3,000
   - b) about 100,000
   - c) about 25 million

2. Which adaptation makes wild tigers strong swimmers?
   - a) flat tails
   - b) webbed feet
   - c) glands in their paws

3. Tiger stripe patterns are unique to each individual tiger.
   - a) True
   - b) False

4. How much do the heaviest adult tigers weigh?
   - a) about 150 lb (68 kg)
   - b) about 600 lb (270 kg)
   - c) about 1,000 lb (450 kg)

5. What best describes the effect that a healthy wild tiger population has on an ecosystem?
   - a) A healthy wild tiger population makes an ecosystem less diverse because tigers eat so many other animals.
   - b) A healthy wild tiger population has no effect on an ecosystem because wild tigers stay away from other animals.
   - c) A healthy wild tiger population makes an ecosystem more stable because wild tigers are important to its web of life.

6. Which of the following tiger subspecies is now extinct?
   - a) Bengal tiger
   - b) Caspian tiger
   - c) Amur (Siberian) tiger

7. Which of the following is NOT an effective way to help wild tigers?
   - a) keeping tigers on farms
   - b) educating children in schools
   - c) supporting patrol teams in India

8. What are three different reasons for the disappearance of wild tigers?

9. Why do you think people still hunt wild tigers?

10. What are two things you can do to help save wild tigers?

Answers: 1. a; 2. b; 3. a; 4. b; 5. c; 6. b; 7. a; 8. Answers may include: habitat destruction, removal of prey, poaching for the sale of body parts, climate change effects, or conflicts between people and tigers living in the same area. 9–10. It's your decision!
Creating a Tiger Food Web

After Reading (Key Content pages 1–3)

1. Reinforce the Key Vocabulary. Say the following: An ecosystem is an interacting community of plants and animals and the nonliving components of the environment in which they live. Food webs show how energy moves between living things within an ecosystem as they eat one another. In general, energy flows from producers to consumers to decomposers. For example, plants create energy from sunlight. Deer get energy by eating the plants. Wolves get energy by eating the deer, while owls get energy by eating mice. When wolves and owls die, bacteria, fungi, and scavengers return their nutrients to the soil for the plants to use.

2. Tell students that they will create food webs for a Bengal tiger in India (the most common wild tiger), using information from the text. Pair students with differing abilities and give each pair a set of index cards. Have them create one card for each of the following animals: tigers, deer, wild pigs, birds, monkeys, fish, elephants, rhinos, bears (which tigers will roost from dens), leopards, reptiles, insects, and worms.

3. The text says that tiger habitats have “dense” plants. Have students add cards for plant foods that might be found in a tiger’s food web in India, such as grasses (eaten most by deer, pigs, elephants, rhinos); flowers, fruits, berries, nuts (birds, pigs, monkeys); and tree leaves (mostly elephants).

4. Have each pair put its cards on a large sheet of chart paper, with any plants roughly at the bottom and the tiger near the top. Tell them to pencil arrows in the direction of any organism that eats another one. Ask students what the arrows show about energy flow (flows are complex; most flow toward tiger). Monitor students’ progress.

5. Once students are satisfied with their food webs, have them glue their cards to the sheets to make food-web posters. Then ask for a few teams to volunteer to present their food webs to the whole group. Presenters should be praised for any logical connections, but their peers should also be encouraged to suggest revisions.

6. Ask students to consider what needs to be protected to support a tiger’s food web. Point out that a tiger feeds on various animals that in turn depend on many plants. Guide students to recognize that protecting tigers means protecting habitats and, therefore, other animals.

7. Place an index card labeled “humans” at the top of one of the students’ webs. Ask students to share their thoughts on how humans might also affect tiger food webs (for example, by eliminating habitats, competing for their foods, or hunting tigers).

8. Ask each student to write a brief paragraph summarizing what he or she learned from the activity. Encourage them to use effective writing techniques, such as writing a topic sentence and supporting it with examples.

Adapting the Activity
(for younger readers)

- Discuss what a food web might look like in an ecosystem closer to where students live. Even in urban areas, students can consider the food webs within a park—for example, connections between grasses, bugs, small birds, hawks, and so on. Omit discussion of energy flows as too complex for this level.

- Instead of making food webs, discuss tiger adaptations. Use the diagram from Key Content page 1 as a base. Encourage students to learn about and report back on the body features that make wild tigers well suited to their environments.

FOR MORE INFORMATION
Action Tiger Conservation:

Extending the Activity
(for advanced readers)

- Have students write sentences beside their food-web arrows to better explain the relationships and flow of energy between organisms consuming one another (this may require research).

- Have students research and create diagrams similar to the one on Key Content page 1 to show the adaptations of some other animal for its environment (for example, a polar bear has thick fur and fat for the cold Arctic, broad feet for spreading weight on ice, and so on).

- Have students research the concept of habitat fragmentation (from Key Content page 2) and write about how an animal near where they live is cut off by limited passage between habitat areas (for example, highways cut off wildlife corridors).
Main Learning Outcomes: Students will understand main threats to tigers, locate text information, identify main ideas and supporting details, and identify problems and solutions.

Discussion Questions (Key Content pages 2-5)

- Why does the author write that “what’s good for tigers is often good for everyone” on page 3?
- Why does a higher demand for tiger products in general lead to more poaching of wild tigers?
- Why do countries need to coordinate with one another to protect wild tigers?

Identifying Threats and Responses

After Reading (Key Content pages 2–5)

1. Review the “Tigers Under Threat” section on page 2. Help students find the threats to wild tigers mentioned in the last three paragraphs on this page (loss of habitat due to human population growth, lack of prey species due to hunting, poaching for sale of body parts).

2. On chart paper or an overhead transparency, create a whole-group chart similar to the one shown below.

3. Have students review each page that describes a focus country (Key Content pages 3–5). Using Worksheet 3, ask them to work in pairs to record what the main threats are to wild tigers in each country, what sentence support their conclusions, and what people are doing about the threats. Encourage them to read the captions and sidebars on each page, as these often tell what people are doing about the threats. Allow students time to discuss their thoughts in pairs. Students who want to work ahead may address the final column of the chart, but they are not required to do so while working in their pairs.

4. Have students return to the larger group. Ask for volunteers to say what they named as the threats to wild tigers in each focus country. Encourage them to read the supporting statements from the text. Take notes on the whole-group chart in the “Threats,” “Supporting Statements,” and “What People Are Doing” columns.

5. Discuss as a whole group what more people could be doing to save wild tigers. Prompt students to think about what governments might do, what conservation groups might do, and what individuals might do. Write responses on the group chart. Ask students what they themselves could do. To complete the lesson, or as homework, ask your students to “Imagine a world without tigers” in an essay, poem, story, piece of art, song, or other creative expression.

Adapting the Activity
(for younger readers)

- Younger readers could record simpler notes in their charts, such as page numbers rather than quotations for “Supporting Statements.” You might also choose to conduct more of the lesson as a whole-class discussion rather than as partner work.
- Bring a local focus to one of the threats affecting wild tigers, such as habitat loss. Ask students if they know how this threat affects wildlife in their area. Provide them with an example, if necessary. Discuss what people are doing about the threats and what more they might do.
- Instead of focusing on the threats to wild tigers, focus on the final creative activity in this lesson (to imagine a world without tigers). Allow students more time for their creative responses.

Extending the Activity
(for advanced readers)

- Have students work individually with a “Threats and Responses” chart. Tell them to write several sentences for each threat they identify.
- Encourage students to conduct further research into threats in one of the focus countries or in a country that appears to have tigers but is not discussed in the text (such as Malaysia).

FOR MORE INFORMATION

IFAW: http://www.ifaw.org/tigers
World Bank Report: Building a Future for Wild Tigers
http://www.worldbank.org/tigers
# Worksheet 3: Threats and Responses Chart

**Directions:** Starting with page 3, write the name of each page’s focus country in the left-hand column. Then determine the threat(s) that wild tigers face in each country. Write the threats and the sentences from the text that tell you these threats. Then write what people are doing to respond and what more people could do.

<table>
<thead>
<tr>
<th>Country</th>
<th>Threats</th>
<th>Supporting Statements</th>
<th>What People Are Doing About the Threats</th>
<th>What More We Could All Do About the Threats</th>
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Debating Tiger Farms

Fictional News Article Worksheet

1. Introduce the news article to students. Emphasize that this is not a real newspaper article, but that it is based on real events and real issues around tiger farming in China. Have students recall information they learned from the rest of the text about tiger farming in China (from Key Content page 4). If they have developed graphic organizers for that previous content, have them review these now.

2. Discuss the photographs, captions, and headings in the article and ask students to predict what the article will be about. Point out that the first paragraph of a news article usually gives the most important information, so they should pay special attention to this when they read. Set a purpose for reading: tell students to look carefully at what people say on either side of the tiger-farming debate.

3. Have students read the article individually or in pairs, depending on their abilities. You can also read the article aloud with the whole class.

After Reading

4. Read the final paragraph of the article aloud to the whole class. Tell students that they will role-play a “follow-up conference” with the same sides of the debate as are represented in the article. Divide the class into groups that represent the “for farming” side, the “against farming side,” “moderators” (explain the term, if needed), and “reporters.” Assign the groups at random and ask students to do as well as they can presenting their roles, even if they do not completely agree with them.

5. Have the student groups reread the article to find the arguments “for” and “against.” Have them choose one member as a note-taker who can keep a simple T-chart for the arguments. Monitor and help the groups find the article’s main points for debate. Emphasize that good debaters find the main arguments for their own side as well as for the other side, so they can prepare for the other group’s arguments. If time allows, encourage students to practice delivering their arguments. Tell the reporters and moderators that they need to know both sides well.

6. Stage the “follow-up conference” in which the “for” and “against” teams present their arguments. The teams might choose members to play the roles of the people named in the article. Or they might choose to have each member take 30 seconds to present parts of the team argument. Remind moderators to make sure the discussion stays respectful. Have the reporters take notes and then give a balanced “TV report” on it, without saying who “won.”

7. After the debate and reports, gather the whole class again to discuss what they learned about the sides in the debate, whether their opinions changed, and how they feel about the issue in the end. You might choose to take a blind vote at this point to see how the class feels overall.

Adapting the Activity
(for younger readers)

- As an alternative to the debate activity, have younger readers read the Other Big Cats Chart and complete the Big Cat Comparisons (Lesson & Worksheet 5).

Extending the Activity
(for advanced readers)

- Have students write newspaper articles of their own, based upon the discussion they had rather than the conference in the original text. Ask that they structure their articles by telling general information in the first paragraph and then filling in details.

FOR MORE INFORMATION

IFAW Special Report: ifaw.org/farmingtoextinction
Tiger farms in China under fire

Conference session sparks heated debate on controversial facilities

NEW DELHI, INDIA — Tiger farms were a main topic of discussion at the recent All-Asia Conservation conference in New Delhi, India. Conservationists sparred with tiger-farm investors during an all-day session. The investors, who hoped to raise support for tiger farming, faced fierce opposition from various critics for continuing to seek legalization of tiger-part sales.

As few as 3,000 tigers remain in the wild—making them one of Earth’s most endangered animals. Meanwhile, at least 6,000 live in captivity on Chinese tiger farms. China’s 1993 ban on trade in tiger parts and products has not discouraged the owners of these farms. Hoping to someday make a large profit from the sale of tiger parts, they are pressuring the Chinese government to lift its trade ban. In the meantime, they operate the farms as tourist attractions.

Tiger bone and other tiger products were once used in traditional Chinese medicine, sometimes called TCM. Peng Wu, a farm investor, asserted, “Tiger bone products benefit human health. For many centuries, they have relieved pain for people with ailments.”

However, the TCM community has developed alternative remedies that do not use tiger ingredients. Ming Li, an expert from the World TCM Association, stated, “Traditional Chinese medicine has great respect for nature. Tiger farming goes against everything we stand for. To support the use of tiger bone in medicine would harm TCM’s reputation around the world.”

An estimated 800 to 1,000 tigers are born each year on tiger farms. The farm owners claim to be helping to protect tigers from extinction. “These tigers are alive because of us,” said farm owner Ho Jin.

However, as Deepak Gupta, a wildlife expert in India, noted, “Because the tigers on these farms are semi-tame, they lack the survival skills to ever be released into the wild.”

Asian conservationists believe that Chinese tiger farms are putting tigers at further risk. Chat Khorsky, a leader in anti-poaching efforts in the Russian Far East, asserted that captive breeding of tigers for trade encourages poaching. Khorsky stated, “It is much cheaper to fill a demand for tiger parts by shooting a wild tiger than by raising a captive tiger. The only solution is to eliminate the demand.”

While the session in New Delhi marked a step forward in bringing opposing groups together for discussion, the debate is likely to continue as long as tiger farms and the desire for tiger parts exist.
# Worksheet 5: Big Cat Comparisons

Name: ________________________________ Date: ________________________________

**Directions:** Review the chart “Big Cats Around the World.” Choose two big cats that you want to compare. Use the questions below to guide your thinking (you may also think of other things to compare). List similarities between cats where their boxes overlap. List differences in the outer parts of the boxes.

- Where does each cat live?
- What does each cat look like?
- What is each cat’s conservation status?

<table>
<thead>
<tr>
<th>Cat #1:</th>
<th>Both Cats</th>
<th>Cat #2:</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

**Both Cats:**

**Cat #1:**

___________________________

**Cat #2:**

___________________________