

# International Snow Leopard Trust

## Put the Mountains on the map

**Goal:** For students to become familiar with the political and physical geography of Central and Himalayan Asia  
**Overview:** This lesson, using atlases and maps requires students to find and transfer information from a variety of sources. Students identify mountain ranges, countries and cities in Central and Himalayan Asia. The lesson also stimulates discussion about the geo-politics of the region.

**Grade:** 5 and above

**Group Size:** up to 30 students working in small groups or pairs

**Time:** 45 mins to 1 hour, with opportunity for written follow up.

**Materials:** copies of 2 sided worksheets, enough atlases for pairs or groups of three to work together.

**Subject:** Geography, social studies, politics

**Keywords:** atlas, index, range, habitat,

**Objectives:** Knowledge: greater understanding of the geography of Central Asia.

Skills: Using maps; looking up information using an atlas index; transferring information from different sources

Values: Students will have a greater appreciation of the geo-political issues of central Asia and an understanding of the challenges of trans-boundary conservation

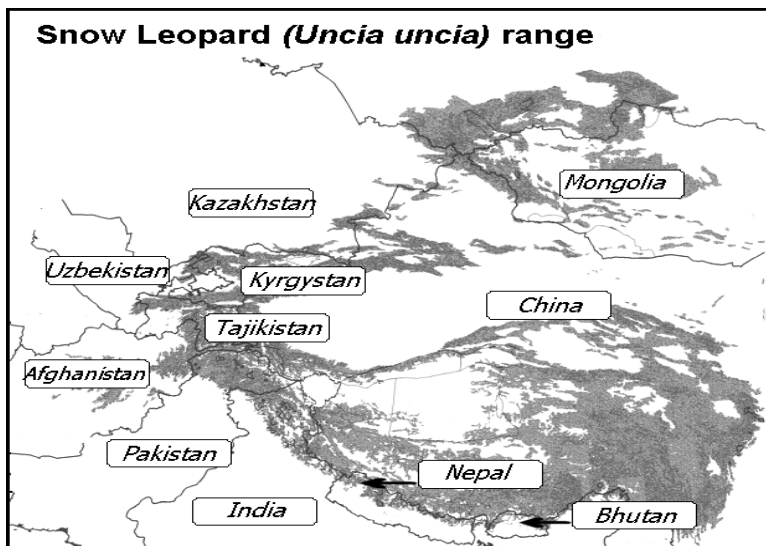
**Preparation:** photocopy enough worksheets for each pair of students; obtain atlases

### Introduction:

1. Elicit what students know about where snow leopards live: continent (*Asia*); countries (*Bhutan, Nepal, India, Pakistan, Afghanistan, Tajikistan, Kyrgyzstan, Uzbekistan, Kazakhstan, Russia, Mongolia, China*), kind of habitat (*mountains*);
2. Explain to them that they will be learning more about the countries and mountains of snow leopard habitat and that they will be using atlases
3. Make sure students are familiar with using an index and grid reference for finding information in an atlas.

### Part 1

1. Hand out the worksheets without the atlases first and see if students can identify any of the mountain ranges
2. Then hand out atlases for students to check. 1 Himalaya; 2 Hindu Kush; 3 Pamir; 4 Tian Shan; 5 Kunlun; 6 Altai
3. Find:
  - a) Three Highest Peaks: Mt Everest (Nepal/Tibet), K2 (Pakistan), Kanchenjunga (Nepal/India)
  - b) 2 Deserts: Gobi Desert (China and Mongolia), Takla Makan Desert (China)
  - c) 3 landlocked countries: Mongolia, Kyrgyzstan, Nepal, Bhutan, Tajikistan, Afghanistan



### Part 2

Move onto the country identification activity on the next page. This could be done as a speed game, or you could give groups cards with the certain country names, which they could be responsible for finding.

### Capital cities:

Bhutan: Thimphu, Nepal: Kathmandu, India: New Delhi, Pakistan: Islamabad, Afghanistan: Kabul, Tajikistan: Dushanbe, Kyrgyzstan: Bishkek, Uzbekistan: Tashkent, Kazakhstan: Astana, Russia: Moscow, Mongolia: Ulaanbaatar, China: Beijing

### What do you notice about the shaded areas?

- Snow Leopard range often runs along borders, because borders between countries often run along mountain ranges.

### Why is it difficult to protect an animal whose range is so spread out across different countries?

- Across border trade in snow leopard parts such as hides and bones
- Different cultural and religious influences: Kyrgyz Republic and Pakistan have strong hunting traditions, Tibet and Mongolia are Buddhist so less hunting
- Laws are different in all countries
- Research, monitoring and wildlife management is very difficult when wildlife populations cross international borders. In much of its range, snow leopard home-ranges cover very large areas and include more than one country.
- Borders often run along peaks of mountain ranges. Where there are borders, there are usually military, that means guns and often poaching of SL prey species to supplement meager military rations
- Different languages exacerbate difficulties of getting countries to collaborate on transboundary conservation efforts
- Political instability and war makes it very difficult to implement effective conservation programs

### What could conservation organizations do to overcome the difficulties?

- Trans-boundary protected areas are being established (for example between Pakistan and China, between Mongolia, Kazakhstan and Russia, between Kyrgyzstan Kazakhstan and Uzbekistan). These present huge challenges, but are working in the right direction!
- Convention on International Trade in Endangered Species (CITES) prohibits trade in any endangered species. Most snow leopard countries are members of CITES but trade still takes place illegally. Governments need to be made more aware of the issues so they support anti-trade initiatives.
- Develop small, local conservation incentive programs at grassroots level in several different countries.
- Encourage linkages and exchanges between communities in different parts of snow leopard range.

*PUZZLER ...The number of countries where snow leopards occur increased during the 1990s, but the number of snow leopards in the world actually decreased... How can that be so?*

Until the early 1990s the Soviet Union counted as one country. During the 1990s, several of the former Soviet republics broke away from the Union and became independent countries. We used to say snow leopards occur in the **Soviet Union** (one country). Now we say snow leopards occur in **Russia and Kazakhstan** and the **Kyrgyzstan and Uzbekistan and Tajikistan** (five countries). The snow leopards have not actually moved into lots of new countries!

Poverty and the collapse of social and economic structures have resulted in horrific levels of poaching so the number of snow leopards in the region decreased, but the number of countries where they occur has increased!

### Project

Students could research 1 country and prepare short presentations covering some or all of the following topics:

- where snow leopards occur in that country
- what the conservation challenges are
- what local, national and international organizations are doing to help conserve snow leopards
- what the local culture/religion is in the part of the country where snow leopards occur and how that affects conservation

Brainstorm internet and library sources for finding information, these should include country specific websites and:

[www.snowleopard.org](http://www.snowleopard.org) (Mongolia, Kyrgyzstan, Pakistan, India, China)

[www.cites.org](http://www.cites.org) (CITES – Convention against International Trade in Endangered Species)

[www.nature.org](http://www.nature.org) (The Nature Conservancy)

[www.conservation.org](http://www.conservation.org) (Conservation International)

[www.snow-leopard.de](http://www.snow-leopard.de) (German Snow Leopard Project in Kyrgyzstan)

[www.snowleopardconservancy.org](http://www.snowleopardconservancy.org) (India, Nepal)

### Assessment

Students should be able to :

- list at least 5 mountainous countries with their capital cities in Asia and find them on a map
- list at least 2 mountain ranges in Asia and find them on a map
- be able to articulate some of the challenges of transboundary wildlife conservation