Himalayan Ibex

Part of: GS Prelims and GS-III- Environment

A recent study by scientists of the Zoological Survey of India (ZSI) has proved that Himalayan Ibex is a distinct species from the Siberian Ibex.

Key Points

- The study was funded through the National Mission on Himalayan Studies.
  - The National Mission on Himalayan Studies is implemented by the Ministry of Environment, Forest and Climate Change.
  - It targets to provide much needed focus, through holistic understanding of system's components and their linkages, in addressing the key issues relating to conservation and sustainable management of natural resources in Indian Himalayan Region (IHR).
- The study was based on genetic analysis conducted with the inclusion of the sequences available from all across the distribution ranges of Siberian Ibex.
- The study revealed that Siberian Ibex was estimated to have diverged from Alpine Ibex during the Pleistocene epoch (2.4 million years ago) rather than during the Miocene-Pliocene boundary (6.6 million years ago).
- Scientists presume that the ‘montane systems’, formed by a series of climatic oscillations and temporal topographic metamorphosis, have broken up the contiguous distribution of the species and accelerated allopatric speciation.
  - Allopatric speciation means speciation because of geographic and reproductive isolation.
- The study also reveals that Siberian ibex is a polytypic species, plausibly formed by lumping of at least 2 species and or 3 to 4 sub-species.
  - Polytypic species are species that contain two or more subspecies.

Siberian Ibex (Capra sibirica)

- Siberian Ibex is a species of wild goat.
- It is distributed in diverse habitats, ranging from cold deserts, rocky outcrops, steep terrain, high-land flats and mountain ridges to low mountains and foothills.
- From Mongolia, its distribution extends towards Altai, Hangai, Gobi-Altai, the Hurukh mountain ranges as well as Sayan Mountains near Russia and scattered populations in the small mountains of Trans-Altai Gobi.
- In Asia, Ibex is distributed in the Montane habitats, ranging in elevations from 500 m to 6,700 m in countries like India, Kazakhstan, Tajikistan, Mongolia, Pakistan, Southern Siberia and China.
- Its IUCN status is least concerned.

Himalayan Ibex (Capra sibirica hemalayanus)

- Earlier the Himalayan Ibex was regarded as a subspecies of the Siberian Ibex (Capra sibirica)
- The Himalayan Ibex is distributed mainly in the trans-Himalayan ranges of the Union Territories of Ladakh and Jammu and Kashmir and Himachal Pradesh.
The ZSI was established on 1st July, 1916. It has its genesis in the establishment of the Zoological Section of the Indian Museum at Calcutta in 1875. It is headquartered at Kolkata. It functions under the Ministry of Environment, Forest and Climate Change. It acts as the premier Indian organisation in zoological research and studies to promote the survey, exploration and research of the fauna in the country.

PT “PICKSUP”

Endemic species are those that are found in just one region and nowhere else in the world. For example, kangaroos are originally endemic to Australia and are found nowhere else in the world. The cases where they have been spotted outside their natural habitat is due to humans introducing them when the animal was in captivity.

There are also other marsupials that are endemic only to Australia and its surrounding islands. The Tasmanian Tiger is one such animal that was endemic to Australia, Tasmania and New Guinea. But now, it is extinct.

Endemic Species of India

A list of the endemic species of India is mentioned below:

**Asiatic Lion, Gir Forest**

Asiatic Lion is also known as the Indian Lion and can be only found in and around Gir Forest National Park of Gujarat. These are listed as endangered species. These are one of the five big cats found in India, the others being Indian Leopards and Bengal Tigers.

**Kashmir Stag, Kashmir Valley**

Also known as Hangul, Kashmir Stag is found in the dense forests of Dachigum National Park, Kashmir Valley and Chamba district, Himachal Pradesh.

**Lion-Tailed Macaque, Western Ghats**

It is the rarest and the most threatened and endangered primate species found only in the Western Ghats of Southern India.

**Purple Frog, Western Ghats**

The purple frog, also known as Pignose frog is only found in the rainforests of western ghats in India. It spends most of its life underground.

**Sangai Deer, Loktak Lake**

It is also known as Brow Antlered Deer exclusively found in Keibul Lamjao National Park of Manipur. This park is a marshy wetland located in the southern parts of Loktak lake.

**Nilgiri Tahr, Nilgiri Hills**
It is a wild sheep species, endangered and endemic to the Nilgiri Hills of Western Ghats.

Other endemic species of India include:

- Pygmy Hog, Assam
- Bronzeback Vine Snake, Western Ghats
- Nilgiri Blue Robin, Nilgiri Hills
- Malabar Civet, Western Ghats
- Anaimalai Gliding Frog, Anaimalai Hills
- Namdapha Flying Squirrel, Arunachal Pradesh
- Indian Giant Squirrel
- Bonnet Macaque

Name some plant species that are endemic.

Some of the endemic plant species include- Nevada primrose, Waxflower, Pennell’s whitlowgrass, Intermountain wavewing, Mt. Wheeler sandwort, etc.

Examples of Endemic species

There are several ways in which a species may come to be endemic to a particular area. A broadly distributed population may disappear from several habitats due to changes which have occurred in their natural habitat. The changes could be an influx of predators, human activities, and climate changes.

All other species that were widely distributed around the world starts to die out until the species becomes forcefully restrained to just one region.

For example, Endemic species, such as the tortoises of the Galápagos and the lemurs of Madagascar can be found small islands. Big islands also provide the same isolation but on a larger scale.

Antarctica Hawaii and Australia are all huge land masses where we can find a lot of endemic species. Kangaroos, koalas, and polar bears are all endemic to these places.

In the case of endemic plants, sometimes species become endemic due to habitat destruction as discussed above.

The Redwood Forest on the West Coast of the United States has become endemic as it is now almost entirely limited to California. While there was a time when Redwoods used to cover much of the United States but have been destroyed by logging and are now limited to a small conservation area.

Diseases, on the other hand, can also be endemic. An endemic disease may be geographically isolated or it may be isolated to a certain group. Malaria is an example of an endemic disease because it is mostly limited to small pockets of infection in Africa.