

Indian Oak Trees

Prelims: Current events of national and international importance | Conservation

Why in News?

The Uttarakhand High Court has stayed the felling of oak trees in Mussoorie for construction by the Municipal Council.

- These are indigenous species found across the ***Himalayan region*** ***between 1,000-3,500 meters altitude***, often found in the Western Himalayas and Arunachal Pradesh.
- **Genus** - Quercus.
- **Family** - Fagaceae.
- **Prominent Species** - The 5 prominent evergreen Himalayan species

Himalayan Oak Species & IUCN Red List Status

<i>Q. leucotrichophora</i> (Banj)	→	Least Concern
<i>Q. floribunda</i> (Moru)	→	Least Concern
<i>Q. semecarpifolia</i> (Kharsu)	→	Least Concern
<i>Q. lanuginosa</i> (Rianj)	→	Least Concern
<i>Q. glauca</i> (Phaliyant)	→	Least Concern

- **Soil** - Moist, well-drained, loamy soils; rich in organic matter.
- **Climate** - Temperate to cool climates; thrive in areas with high rainfall and humidity.
- **Land Type** - Mountain slopes, valleys, and temperate forest belts.

Oaks are generally slow-growing trees, Himalayan Oaks can grow up to 10-35 metres.

- **Habitats** - They dominate moist temperate forests, often serving as the "climax species"—the final stage of ecological succession in their ecosystems.
- **Distribution (India)** - Approximately 20 species are in the Western Himalayas and 15 in the Eastern Himalayas (e.g., Arunachal Pradesh).
- **Global distribution** - Temperate deciduous, Mediterranean evergreen, montane oak forests (North America, Asia, Europe).

Mexico has the largest number of oak species globally.

- **Uses** - Fuelwood & Fodder, timber, and traditional uses.
- **Ecological Importance**
 - Soil & water conservation.
 - Assist watershed protection by promoting the recharge of springs.
 - Biodiversity hubs.
 - Provide carbon stock and regulate microclimate.
- **Threats & Degradation** -
 - **Rate of Degradation** - 0.36 sq km/year.
 - **Chronic Disturbance** - Grazing, lopping, litter removal.
 - **Invasive Species** -*Eupatorium adenophorum*, *Lantana camara*, chir pine replacement.
 - **Forest Fires** - Oaks highly susceptible; damaged stems prone to pathogens.



Reference

[The Indian Express | Oak Trees](#)



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