Sub Alpine zone

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Context: Bengal Tiger makes surprise visit to Bageshwar's subalpine zones

- **Sub-Alpine Zone**: The **ecological zone immediately below the Alpine zone** in mountains, typically **between the tree line and lower montane forests**.
- Marks the **transition between dense forests and treeless Alpine meadows**.

Altitude Range

- **Himalayas**: ~ **3,000 – 4,000 meters (10,000 – 13,000 ft)**
- **Other Mountain Ranges**: Varies depending on latitude and climate
- Below this lies the **Montane (temperate) forest zone**, above is the **Alpine zone**.

Climate

- **Cold temperate climate**
- Short growing season
- Heavy snowfall in winter
- Cool summers with high humidity

Vegetation

- Dominated by **coniferous trees**:
- Fir, Spruce, Pine, Hemlock
- Mixed forests near lower sub-alpine levels
- Shrubs and grasslands in upper sub-alpine areas
- Transition to **Alpine meadows (treeless, herbaceous vegetation)** near the tree line

Fauna

- Adapted to **cold, rugged environments**:

oHimalayan Monal (national bird of India)

oMusk deer

oSnow leopard (in upper reaches)

oHimalayan Tahr

oRed panda (in eastern Himalayas)

Economic & Ecological Importance

- Source of **timber, medicinal plants, and fodder**

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- Supports **hill agriculture and pastoralism** (sheep, yak)
- **Watershed protection** – origin of many rivers

Important for **biodiversity conservation**