Why Are Edges Of Habitats Vulnerable?

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What Is an Edge of a Habitat?

- An edge is a boundary that divides two different land types
- Edges can be natural, such as the borders between land, water, meadows, and forest.
- They can also be human made like parking lots, roads, or buildings

Why are habitat edges so vulnerable?

- Foreign species thrive in the edges of forests and outcompete the native species
- Edges are areas with more noise, light, pollution, human recreation, and roadkill
- Microclimatic changes like increased sunlight, higher soil temps, and increased/decreased humidity can lead to changes in vegetation growth rates within the forest edge

Why Is This a Negative Situation?

- Human activities cause disturbance and create edge habitat
- Animals are forced to move deeper into the forest because there are not enough resources in edges for them to survive
- This increases competition for animals at the interior of the habitat, as there are less resources
- This can be harmful to local and native species

Edges vs. Interiors of Habitats

Edge of Habitat

- Edges have more light pollution, roadkill, and noise pollution
- Animals on the edge adapt much easier to both interiors and edges
 - Invasive plants and animals are more common in edges

Interior of Habitat

- Interior habitats are generally healthier ecosystems
- Animals in the interior don't adapt as well to changes
- Native species are in balance with available resources

Habitat Fragmentation

- The number of edges increases when habitats are fragmented
- Examples could be building roads, deforestation, and agriculture land
- Edge effects can increase the proportion of habitat edges in relation to the total area of a habitat





Sources:

- <u>https://www.greenbiz.com/article/when-it-comes-habi</u> <u>tat-having-edge-not-good-thing</u>
- <u>https://www.nature.com/articles/nature24457</u>