

Biological Diversity

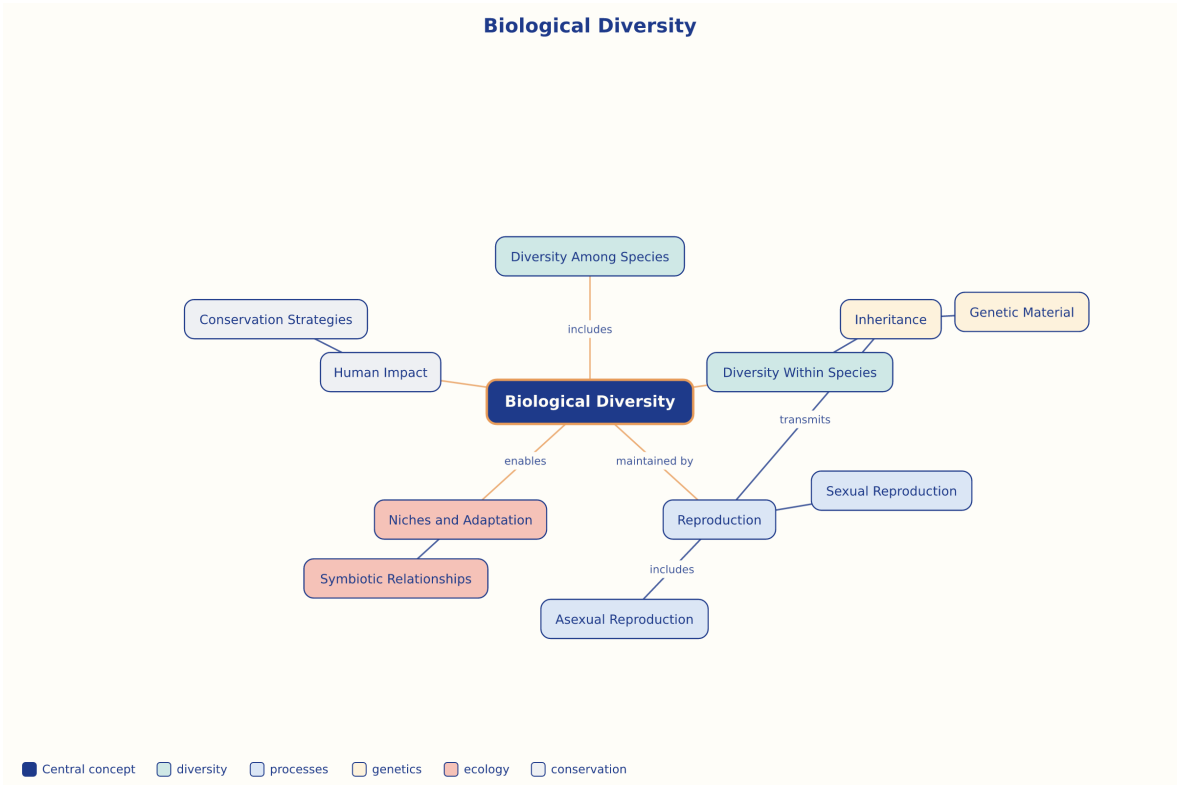
Central concept: **Biological Diversity**

Connections

- Biological Diversity (includes) -> Diversity Among Species
- Biological Diversity (includes) -> Diversity Within Species
- Biological Diversity (maintained by) -> Reproduction
- Biological Diversity (enables) -> Niches and Adaptation
- Biological Diversity (includes) -> Reproductive Processes and Variation
- Reproduction (includes) -> Sexual Reproduction
- Reproduction (includes) -> Asexual Reproduction
- Reproduction (transmits) -> Inheritance
- Inheritance (depends on) -> Transmission of characteristics from parents to offspring
- Diversity Within Species (shaped by) -> Inheritance
- Niches and Adaptation (creates) -> Symbiotic Relationships
- Variation in Characteristics (transmitted) -> Offspring from Parents

Notes

- **Biological Diversity:** Range of species in environments and variations within species maintained through reproduction and affected by ecological factors [Topic](#)
- **Diversity Among Species:** Variation that distinguishes different species and enables them to occupy different niches in the same ecosystem [Outcome](#), [Outcome](#)
- **Diversity Within Species:** Subtle variations in characteristics found within individual species, including discrete and continuous variation [Outcome](#), [Outcome](#)
- **Reproduction:** Natural process that transmits species characteristics to offspring through sexual or asexual mechanisms [Outcome](#), [Outcome](#)
- **Sexual Reproduction:** Reproduction involving two parents and formation of zygote through fertilization, allowing recombination of characteristics [Outcome](#), [Outcome](#), [Outcome](#)
- **Asexual Reproduction:** Reproduction by single organism through binary fission, budding or spore production, transmitting identical characteristics [Outcome](#), [Outcome](#), [Outcome](#)
- **Inheritance:** Transmission of heritable characteristics from parents to offspring; some traits influenced by both heredity and environment [Outcome](#), [Outcome](#)
- **Genetic Material:** Chromosomes, genes and DNA that store genetic information and determine heritable characteristics [Outcome](#)
- **Niches and Adaptation:** Specific roles organisms occupy in ecosystems; variation enables closely related species to survive in same ecosystem [Outcome](#), [Outcome](#)
- **Symbiotic Relationships:** Dependencies among species classified as mutualism, commensalism or parasitism that link survival of species [Outcome](#), [Outcome](#)
- **Human Impact:** Human actions affecting species survival and variation, including extinction and extirpation of native species [Outcome](#)
- **Conservation Strategies:** Local and global approaches to minimize loss of species diversity including protected areas and breeding programs [Outcome](#)



Biological Diversity