

Final Position Statement

Conservation of Biological Diversity

Biological diversity – or biodiversity – is the variety of life from single-celled organisms to the largest vertebrates, and the processes that support life, including the interactions among organisms within the communities and ecosystems in which they occur. Biodiversity includes the genetic differences within each species and diversity within ecosystems. Today there are around 8 to 20 million organisms, possibly more, but only about 2 million have been recognized and named. Biological diversity is integral to a thriving world and is fundamental to ecosystem resilience and function, including ecosystem services beneficial to humans. Threats to biodiversity are substantial and increasing.

Attributes of biodiversity include structure, function, and composition of genes, individuals, populations, subspecies, species, communities, and ecosystems. Within ecosystems, biological communities (plants, animals, fungi, microorganisms) combine with abiotic processes to form self-organizing, regenerative functional units. Biological diversity within ecosystems can depreciate if their integrity is not maintained and can collapse abruptly reducing their productivity and resilience. The role of biodiversity in preserving an ecosystem's integrity is essential but not fully understood.

Major threats to reducing biological diversity at local and global levels include human-caused habitat destruction, over-exploitation, biological invasions, climate change, and pollution. The rapid modification of natural ecosystems by human activities is leading to the extinction of wild flora and fauna at rates far exceeding natural evolutionary processes. Some scientists have referred to the current loss of biological diversity as a mass-extinction event.

Conservation of biological diversity includes protection and active restoration of rare, declining, threatened, and endangered species as well as keeping common species common. It also includes the conservation of all other components and processes necessary for ecosystem integrity. Many nations, Indigenous peoples, and organizations around the globe recognize the need to conserve biological diversity. These groups are actively pursuing that goal through cooperative ventures that focus on the biome level across different land and water ownerships, use, borders, and evaluations. They also consider biodiversity conservation in terms of business, economics, and governance systems as well. Protected areas that ensure connectivity among landscapes and consider biomes within a matrix of lands and waters play a key role in achieving coordinated biodiversity conservation and sustainability.

The policy of The Wildlife Society in regard to conserving biological diversity is to:

- 1. Advocate for conserving the full spectrum of global biological diversity to maintain a thriving, sustainable world;
- 2. Acknowledge that some human activities pose major threats to biological diversity by

degrading ecosystems, and support policies and management actions that reduce and mitigate these impacts;

- 3. Advocate for economic, business, investor, social, policy, and governance system changes designed to enhance and sustain the conservation of all biological diversity;
- 4. Encourage scientific research on biological diversity, its conservation, and the effectiveness of policies and programs designed to enhance the conservation of biological diversity;
- 5. Inform and advocate for policies, programs, and funding that conserve biological diversity;
- 6. Recognize and support sustainable lifeways and cultural practices in achieving the conservation of biological diversity;
- 7. Encourage use of voluntary actions and enforcement of existing laws as well as enactment of new legislation or regulations, where needed, that will improve the conservation and recovery of biological diversity and species at risk of extinction;
- 8. Advocate for, and support cooperative programs and entrepreneurial initiatives that conserve biological diversity through transdisciplinary, collaborative, and system-oriented approaches;
- 9. Encourage reduction, elimination, and mitigation of human-caused climate change impacts destabilizing the function, systems, and connectivity of the biotic and abiotic elements of biodiversity;
- 10. Recommend a cautious and conservative approach when the effects on biological diversity resulting from human growth and development are uncertain.

Approved by TWS Council in November 2023.