



NABT Position Statement

Teaching about Environmental Issues

Environmental science explores the complex interactions among human populations and their environment. Consistent with the *National Science Education Standards* (National Academy of Science, 1996), the National Association of Biology Teachers holds that environmental science is a vital component of an effective modern biology curriculum that seeks to prepare an informed citizenry. Biology teachers should recognize how the understandings gained through environmental science interact with local, national and global environmental issues. Meeting the environmental challenges that face humankind requires a knowledgeable citizenry that understands how relevant scientific information informs sound policy decisions.

Environmental topics are particularly relevant to students' everyday lives and should be presented within the context of scientific inquiry—to present science as the self-correcting, dynamic process that it is. Instruction should include critical review and analysis of information sources as well as relevant field and laboratory investigations. Specific topics should include: basic ecology, ecosystem loss and degradation, renewable and non-renewable resource use, human population dynamics, global climate change and the earth's biodiversity.

NABT urges its members to incorporate the following into their curricula:

- **Environmental Issues.** Environmental issues should be taught using current biology content knowledge within the context of scientific inquiry. Teachers should help their students develop an understanding of the nature of scientific data and analysis in the context of environmental issues. The limitations of scientific data and analysis should be discussed when presenting and evaluating potential solutions to environmental problems.
- **Decision Making.** Teachers should help the student acquire the skills and knowledge to act on scientific information to make effective decisions on environmental issues. Advocacy without a scientific foundation has no place in biology.
- **Scientific Research.** Scientific research continues to inform society's understanding of earth's dynamic systems. Teachers need to continue to update their own content knowledge in the area of environmental science.
- **Multidisciplinary Connections.** Teachers should highlight the multidisciplinary aspects of the topic and bring in the critical, relevant content from the physical sciences and earth-space sciences.
- **Personal and Social Perspective.** Teachers should teach the various issues within the broader context of the *NSES* "science in a personal and social perspective" standards.

Adopted by the NABT Board of Directors, May 2004