

ABSTRACT

The Use of an Ecoregional Framework for Monitoring

Ed Wiken, Director of Science and Policy
Wildlife Habitat Canada

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Monitoring of biodiversity is necessary to support many conservation needs. Biodiversity monitoring must consider the various levels of interests (i.e. ecosystems/habitats, species and genetics) and their relationships with each other. As well, it must be based on a practical and relevant set of mechanisms to conduct the analysis of biodiversity issues and conservation objectives. The use of terrestrial and marine ecoregional frameworks to conduct biodiversity monitoring is helpful in implementing effective monitoring of biodiversity.

As most of the key issues concerning biodiversity conservation and protection involve land and water use planning, various forms of socio-economic and environmental data must be collected to understand and describe the current state of land and water resources, and biodiversity. Biodiversity concerns for ecosystems/habitats, species and genetics transcend many scales; jurisdictional level planning and assessments do so as well. Monitored data will assist in properly identifying critical biodiversity related information at local through to international levels.

The use of condition, stressor, and response indicators is helpful to guide considerations in monitoring biodiversity. Such indicators help to illustrate specific facts about biodiversity baseline conditions, different views on biodiversity conservation and resource management interests, standards for obtaining and analyzing data, information needs/gaps, and priorities. Current and relevant biodiversity and related data, as well as concrete and expert opinion/knowledge of biodiversity concerns across North America, are not well defined. Ecoregional frameworks have been useful in monitoring ecosystem/habitat biodiversity in particular, due to their comprehensiveness in aggregating socio-economic and environmental data, and providing a more neutral ecosystematic perspective that fosters cooperation among agencies. However, ecoregional frameworks are only one mechanism for monitoring biodiversity. Changes in science, socio-economic interests, conservation goals and strategies, land and water use management plans, and political will are among the many factors that must also be considered. For decision-making purposes, the changing nature of these factors calls for an open and continued process of improving monitoring for biodiversity information into the future.