

Introduction to the Ecoregional Assessment and Biodiversity Vision Toolbox

For the past decade, The Nature Conservancy and World Wildlife Fund have used ecoregions as fundamental geographic units for assessing biodiversity and planning conservation actions. These organizations have provided extensive guidance, tools and resources through several documents, books and CDs, including:

- *A Workbook for Conducting Biological Assessments and Developing Biodiversity Visions for Ecoregional-Based Conservation. Part I Terrestrial Ecoregions* (2000)
- *A Source Book for Conducting Biological Assessments and Developing Biodiversity Visions for Ecoregional Conservation. Volume II Freshwater Ecoregions* (2002)
- *Designing a Geography of Hope Volume 2* (2000)
- *A Resource Guide to Terrestrial Conservation Planning at the Regional Scale* (2003)
- *Drafting a Conservation Blueprint: A Practitioner's Guide to Planning for Biodiversity* (2003)
- *Ecoregional Conservation: An Interactive User's Guide* (2004)

Conservation scientists and practitioners around the world have created numerous ecoregional assessments and biodiversity visions. We have learned a lot about what works well, what does not, what needs improvement and we have more clearly defined challenges. There has also been a great deal of innovation in approaches, methods and tools to provide solutions to these challenges and make our work more robust.

The Ecoregional Assessment and Biodiversity Vision Toolbox compliments existing resources by providing updated primary guidance, tools, resources and case studies generated from insights gained by on-the-ground experiences and innovations. The Toolbox is in a web-based format that allows for continual updates of concepts and materials. The Toolbox is most importantly a continuing opportunity for learning and sharing best practices for ecoregional conservation.

The first version of the Toolbox (summer, 2005) is an initial minimum set of tools, resources and case studies. Ecoregional conservation concepts for the WWF are embedded in the text and case studies are provided. However, the Toolbox is based primarily on TNC language, methods and experiences. For instance, we use the terms ecoregional assessment and biodiversity vision in the standard titles, but have used only the term ecoregional assessment throughout the remainder of the Toolbox for simplicity.

We want to make the Toolbox more inclusive and comprehensive by adding additional experiences from TNC, WWF and efforts from other conservation organizations and resource management agencies around the world, especially examples from outside the United States. The intent is not to be initially as comprehensive as many previous

resources, but to provide examples and the opportunity for conservation practitioners to provide their expertise and lessons learned to the broader conservation community. This is a catalyst for learning and sharing ideas and experiences. The limited set of examples and resources is due to the limited time frame and resources available to the project, not to limit of the excellent work being implemented around the world in the conservation community. There are currently additional resources being accumulated and case studies being created. Anyone interested in providing information and case studies to the Toolbox is invited to do so (see below for contact information). Your contributions are the mechanism for expanding the opportunity for sharing and learning through the Toolbox.

The Toolbox is organized around the Ecoregional Assessment/Biodiversity Vision Standards. These standards are considered key ingredients by TNC and WWF for thorough and credible ecoregional conservation assessments and biodiversity visions. Each standard is categorized by the appropriate Conservation Measures Partnership standard.

The 14 standards are:

1. Engage key internal and external partners and stakeholders throughout the process.
2. Have work plans, content, and products reviewed by peers (and if appropriate, key stakeholders and partners).
3. Use a consistent data management framework in accordance with internal and partner organization data standards.
4. Make all products, methods and supporting data publicly available, in accordance with data sharing agreements.
5. Assemble an ecoregion team with strong and ambitious leadership, ecology, conservation biology, data analysis and management, and socioeconomic capacity.
6. Develop assessments/ visions within ecologically meaningful areas adopted or adapted from existing ecoregional classifications.
7. Select terrestrial, freshwater and marine biodiversity elements across multiple biological and scales.
8. Develop explicit abundance and distribution goals for biodiversity elements.
9. Conduct an analysis of the severity and geographic scope of threats to biodiversity elements, and analyze the root causes of priority threats.
10. Screen all biodiversity element occurrences for viability or ecological integrity.
11. Design ecoregional portfolios/biodiversity visions to best meet goals for all conservation elements, using the principles of efficiency, representation, irreplaceability, and functionality.
12. Set overall priorities for conservation action within the ecoregional portfolio/biodiversity vision and define institutional roles and priorities.
13. Assess and report ecoregional conservation status at appropriate intervals.
14. Produce a long-term financial plan to support strategy and measures implementation, further data development, and analyses.

Within the Toolbox, there is a unit for each standard which includes the following sections (as appropriate) and contains on-line content, downloads and related links when available:

- ❖ **Rationale.** Taken directly from the Standards document.
- ❖ **Suggested Products.** Minimum products that should be generated.
- ❖ **Introduction.** Provides background to the standard organized by sections addressing conceptual issues and methods necessary to fulfill the standard (e.g. practices).
- ❖ **Opportunities for Innovation.** Summary of outstanding issues that need to be addressed and concepts and methods that need development.
- ❖ **Case Studies.** Short summaries of examples from completed ecoregional assessments. Links are provided to the case studies.
- ❖ **Tools.** Data management and analytical tools used to implement the standard. Links are provided to as many tools as possible.
- ❖ **Resources.** Relevant web sites and important publications. Many of these resources and publications provide more extensive information than the case studies. The resources and publications should be reviewed carefully, as they are not just a bibliography.

If you would like to make contributions or have any comments or suggestions to improve the Toolbox, contact Jonathan Higgins at jhiggins@tnc.org. For contributions, indicate the standard, and provide your additions. If your contribution is a case study, download the case study template and fill out the sections as appropriate. Please be sure that there are no copyright restrictions to providing your information on the web. Case studies may be edited or sent back for clarifications.

Many of the materials made available in tool box were reviewed by, obtained from, or developed by staff throughout the WWF and TNC. The success of this project is a result of their commitments, to which we are deeply indebted.

References

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The Nature Conservancy (2000). Designing a geography of hope: A practitioner's handbook to ecoregional conservation planning, second edition. Arlington, VA, The Nature Conservancy.

The Nature Conservancy, World Wildlife Fund, Wildlife Conservation Society, Conservation International, and BirdLife International (2003). A Resource Guide to Terrestrial Conservation Planning at the Regional Scale. Arlington, Virginia, USA.

WWF (2002). Ecoregion Conservation: Securing Living Landscapes through science-based planning and action. A users guide for Ecoregion Conservation through examples from the field. Washington, DC. CD available from Suzanne Palminteri at: Spalminteri@earthlink.net