

## **Article #1: The State of Ecosystems (link #21)**

An Interview with Christian Samper, Ph.D.

- 1) What year was the Millenium Ecosystem Assessment done and what were the reasons for this assessment?
- 2) What is the definition of ecosystems, as put forth in the article?
- 3) What ecosystem services do humans need and rely on?
- 4) Why do you think cultivation of a few types of crops has reduced biodiversity in those ecosystems where cultivation has taken place?
- 5) What types of ecosystems have undergone the most degradation?
- 6) What is the current extinction rate due to human activity compared to what it would have been without human activities?
- 7) What are the reasons for the biodiversity loss of many of the world's ecosystems?
- 8) What are the effects of the loss of biodiversity on humans?
- 9) What are some things that can be done to stop these negative changes from continually getting worse?

## **Article #2: Plant Genebanks: Food Security (link #22)**

- 10) What are plant genebanks and why were they started?
- 11) How many genebanks are there worldwide?
- 12) Genebanks are said to be *ex situ* collections – what does this mean?
- 13) How can you store the genetic information from plants that do not produce seeds?
- 14) What are some reasons as to why genebanks are necessary?
- 15) What is a financial issue that threatens genebanks? Has anything been done about this?