

***Environmental, Conservation Group Experts Join Bioethicists,  
University Researchers, and Scientists from Tree Growing Industry  
To Issue First-Ever Principles for the Responsible Use of Biotech Trees***

(Raleigh, NC – December 9, 2010) The non-profit Institute of Forest Biotechnology (IFB) today released *Responsible Use: Biotech Tree Principles*, the most comprehensive effort ever undertaken to establish ethical and responsible guidelines for the stewardship of biotech trees.

Developed over the last two and a half years with input from hundreds of stakeholders worldwide, the Principles are believed to be the first-ever consensus document of global significance developed for the use and application of a major technology, before the technology is widely used. They are available free online at [www.responsibleuse.org](http://www.responsibleuse.org).

The Principles were developed with the support of environmental and conservation groups, including guidance from The Nature Conservancy, The Conservation Fund, and the Pinchot Institute, as well as some of the world's leading university researchers, government experts, and tree growers and users. Although the Principles are voluntary and are not a certification system, they represent a commitment to find best practices and offer guidance to those involved with the science of forest biotechnology.

"We have a changing climate, deforestation, and disappearing species like the American Chestnut – so many issues that biotechnology has the potential to address through forestry," said Lori Knowles, LL.B, B.C.L., M.A., LL.M , Research Fellow, Health Law Institute, University of Alberta, Canada and Board Member of The Institute of Forest Biotechnology. Ms. Knowles has been a consultant to President Bush's Council on Bioethics and President Clinton's National Bioethics Advisory Commission; the U.S. Food and Drug Administration; Genome Canada; the Canadian Biotechnology Advisory Committee; and the U.S. National Academy of Sciences.

"At the same time, we want to be sure the technology is used only after consideration of personal, environmental, and cultural questions. The Responsible Use Principles provide a mechanism to meet societal needs from trees and their materials, while stewarding our forests for future generations," said Ms. Knowles.

**Inclusiveness and Transparency**

"All advanced technologies impact society and our environment," said Steven Strauss, Ph.D, Distinguished Professor of Forest Biotechnology, Department of Forest Science, Oregon State University, and Member, Implementation Committee for the Principles. Dr. Strauss has earned degrees from Cornell, Yale, and University of California at Berkeley. He has published over 180 scientific papers and has given more than 190 invited lectures on biotechnology and the genetics of trees; he is one of the world's leading authorities on biotech trees.

“I am happy to see that the Responsible Use Principles will continue to evolve with the rapid pace of scientific and social change, and that the process will be kept open and transparent. Biotechnology is a powerful tool, but views on its appropriate application vary widely. It must be used responsibly and in accord with social norms and laws, which are highly dynamic,” said Dr. Strauss.

### **About *Responsible Use: Biotech Tree Principles***

A global team of experts formed the Implementation Committee that guided the development of the Principles while numerous stakeholders provided critical input throughout the process. Five large stakeholder forums were conducted, and dozens of discussions with IFB’s Forest Biotechnology Partners and individualized meetings with environmental organizations were used to craft the Principles.

"With America's forests increasingly threatened by development, pests and disease, we must consider all available tools to grow healthy trees. With the right safeguards, biotechnology offers promising new strategies to save important tree species and protect forests for generations to come. These Responsible Use Principles are a critical step in that direction," said Mr. Lawrence Selzer, President and CEO of The Conservation Fund.

“Even in this age of technology, America’s forests are being relied upon for more and more—as a source of abundant clean water, as critical habitat for many plant and animal species, as sustainable sources of wood, and for low-carbon renewable energy. Meeting these needs while conserving our remaining forests is increasingly a challenge. The appropriate use of forest biotechnology, subject to safeguards such as those at the heart of these Responsible Use Principles, can play a constructive role in addressing that challenge,” said Dr. Alaric Sample, President of the Pinchot Institute for Conservation.

The goal to launch a set of stewardship principles before biotech trees were widely available for use was a time-limiting factor. “We had to balance the immediate need for these Principles with the process of engaging a broad set of stakeholders. We will routinely revise the Principles to ensure they keep pace with the science, dialogue, and stewardship of forest biotechnology,” said Adam Costanza, President of the IFB. The Principles will be reviewed every three years after an initial review in 2012. Additional information about the process of developing and revising the Principles is available at [www.responsibleuse.org/process](http://www.responsibleuse.org/process).

### **About The Potential Benefits and Risks of Biotech Trees**

A growing world population is putting increased demands on forests, and natural invasive threats are causing damage as well. A study led by a team from Lawrence Berkeley and Oak Ridge National Laboratories published in the October issue of *BioScience* found that biotechnology holds the potential to develop trees that counteract the effects of global warming. Biotechnology is already being used to rescue at risk species such as the American Chestnut.

Scientists have already designed biotech trees that are resistant to disease and changing climates, growth rates that produce more wood fiber with fewer inputs on less land than conventional trees, and biometric tools to help police illegally traded timber. Today there are over one million biotech poplar trees with the Bt gene that were established on commercial plantations in China in 2003. Genetic work on cacao trees is being explored to help the species responsible for chocolate that is susceptible to viruses in much of the world. Similarly, when the papaya ringspot virus devastated the Hawaiian papaya industry, cutting production in half, farmers used modern biotechnology to engineer disease resistant trees that rescued the local crop.

Humans have had the ability to change living organisms for thousands of years and have had to reckon with consequences ever since they began breeding and translocating plants. Forest biotechnologies that modify genetic operations are no exception.

“Biotechnology is a powerful tool; there are risks and benefits to using it. These Principles help users systematically and thoughtfully evaluate the potential benefits and risks of a biotech tree along its value chain - including the risk of not using the technology, the effects of gene flow, the possibility of weediness, and impacts on non-target species, among many others,” said Mr. Costanza.

### **About the IFB and Sponsors**

*Responsible Use: Biotech Tree Principles* sponsors are the reason the IFB can carry out this work. The IFB and all of the participants recognize that without sponsorship the comprehensive set of Principles and Practices that can be implemented by any biotech tree user along the value chain would not be possible. This work was sponsored by the Biofuels Center of North Carolina, the North Carolina Biotechnology Center, MWV, and the Weyerhaeuser Company Foundation.

The non-profit Institute of Forest Biotechnology is the only organization to address the sustainability of forest biotechnology on a global scale. With the help of its Partners and Sponsors, it brings diverse stakeholders together to address the societal, environmental, and economic aspects of forest biotechnology. More information about the IFB is available at [www.forestbiotech.org](http://www.forestbiotech.org).

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