

Abstract - "Climate Change: Nature and Action"

Thomas E. Lovejoy, President, The H. John Heinz III Center for Science, Economics, and the Environment, Washington, DC

The current climate change challenge is best understood in terms of the normal and historical functioning of the Earth system. Human activity has caused and is increasingly causing a major distortion in that system, with major consequences for the living planet and human well-being. Change is ubiquitous in the living fabric of the planet, signaling the need for dramatic and immediate action. There is a need to transform the energy base for society as well as to engage the living planet in removing some of the excess carbon in the atmosphere. Although the "energy approach" (reducing emissions of greenhouse gases) and the "ecosystem approach" (restoring degraded lands to increase CO<sub>2</sub> uptake) are both important and complementary, this talk will conclude with an appraisal of the readiness of the Obama Administration, the Congress, and the U.S. public to take specific actions to further either strategy.