

FRIDAY

Mar. 30, 2007

3:30 - 4:30 pm

**LECTURE
THEATRE**

7-212

**LIGHT
REFRESHMENTS
SERVED AT 3:20 PM**

Dr. Terry Chapin

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Ecological and Societal Consequences of Changing Fire Regime in Alaska

Recent warming in Alaska has doubled the annual area burned, primarily because of the increase in number of extremely dry years. Fire severity has also increased, altering seedbed conditions and changing successional trajectories. This has important effects, both globally and locally. At the global scale, the increase in fire acts as both a positive feedback (increased trace gas emissions) and a negative feedback (reduced energy absorbed and transferred to the atmosphere) to climate warming. Human activities have also substantially altered fire regime through both increased ignitions and suppression. At the local scale, this is important because it is increasing the flammability of landscapes near communities, precisely at a time when climatic changes and economic constraints are causing an increase in fire probability. There are potential solutions to increased fire risks, but these require careful communication and planning with local communities.