

## **Forest Management and Conservation**

*Matt Palmer, PhD – Lecturer in Discipline, Department of Ecology, Evolution and Environmental Biology, Columbia University*

Forests are a vitally important habitat for much of the world's terrestrial biodiversity. They are sources of goods, such as timber and food, and provide services, such as carbon storage and water filtration. However, forests worldwide are threatened by overexploitation, conversion, climate change, and invasive species. Learn key issues in forest ecology and management through the local environment of Black Rock Forest. Participate in an all-day field trip to Black Rock Forest to study how pathogens and other invasive species affect forest structure and function. Local observations are scaled up to consider how these issues affect forest conservation on a global scale.

### **Session 1 - Global forests**

#### ***Files:***

##### **File Title**

[Global Forest Resources Assessment 2010](#)

[Lecture slides - global forests](#)

[State of the World's Forests 2011](#)

### **Session 2 - Field trip - Black Rock Forest**

#### ***Files:***

##### **File Title**

[Class data from Black Rock Forest](#)

[Field trip assignment instructions](#)

### **Session 3 - Pathogens and disturbance in eastern forests**

#### ***Required Readings:***

[US Forest Service page on HWA](#)

#### ***Files:***

##### **File Title**

[Foster et al. 2006 - min-holocene hemlock decline](#)

[HWA impacts](#)

[slides from second lecture](#)

[Small et al. 2006 - effects of HWA on vegetation](#)

