The Hudson Valley’s Forests and Their Iconic Wildlife

Matthew Schlesinger

Photos by me unless they’re not

David Beadle
75% forested!

...but it hasn’t always been.
Northeast forest history
What we talk about when we talk about forests
Appalachian oak-hickory forest (Tim Howard)

Hemlock-northern hardwood forest (Greg Edinger)

Oak-tulip tree forest (Tim Howard)

Mountain fir forest (Tim Howard)
Successional oak-hickory forest (Lauren Lyons-Swift)

Pitch pine-scrub oak barrens (Steve Young)

Calcareous talus slope woodland (Tim Howard)

Beech-maple mesic forest (Aissa Feldmann)
What determines today’s forest type?

**Factors:**
- **Soils**
- **Climate**
- **Topography**
- **Land-use history**
- **Natural disturbance**

**Books:**
- *Geology*
- *Forest Hydrology: An Introduction to Water and Forests* by Mingteh Chang

**Maps and Images:**
- Soil profile
- Climate map
- Topographic map
- Natural disturbance (fire)
- Land-use history (agriculture)
Forest inhabitants
Red-headed woodpecker

Kentucky warbler

Broad-winged hawk

Wild turkey
Black bear

Indiana bat

Eastern chipmunk

Northern flying squirrel
Wood turtle

Eastern red-backed salamander

Wood frog

Eastern box turtle

Marbled salamander

Timber rattlesnake
Value to humans
MORE THAN 50% OF U.S. DRINKING WATER ORIGINATES IN FORESTS
From everywhere
Threats and opportunities
Matrix forest blocks

10,000+ ac of unbroken forest
Other unwelcome visitors

- Chestnut blight
- White pine blister rust
- Asian longhorned beetle
- Emerald ash borer
- Southern pine beetle

Photos by The Internet
Heavy deer browse

Healthy understory
Exclosures in the forest and garden
Changing temperature

Current

2050

1.8° to 3.2° C warmer

CCCMA, a2a from http://worldclim.org/
Changing precipitation

Current  2050

CCCMA, a2a from http://worldclim.org/

3.6” drier to 1” wetter