

# Hydrobiogeochemical Research at the Huntington Forest: Effects of Atmospheric Deposition and Climate Change

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Source to Sink: Hudson River Watershed Research and  
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## What do we have and what are we doing?

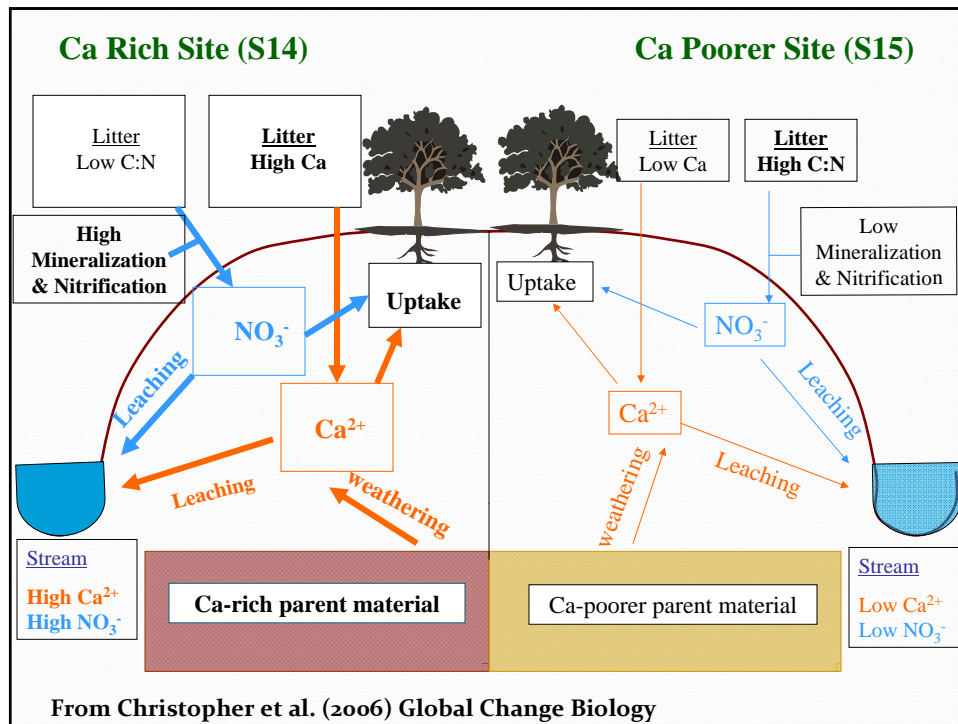
- Huntington Forest has a state of the art facility for monitoring atmospheric deposition and climate change on watersheds in the Adirondacks
  - NADP/NTN (Wet deposition, 1978)
  - CASTNET (Dry deposition and ozone, 2002, AIRMON before)
  - MDN (Wet mercury deposition, 1999)

## Watershed

- Headwater of the Hudson River
- Arbutus Watershed part of the ALTM (Adirondack Long Term Monitoring) with monthly chemistry data from 1982. Monitoring now includes 52 lakes
- Only watershed in Adirondacks with continuous hydrological and biogeochemical monitoring since 1991.
- Expansion of monitoring to inlet, wells, subcatchments, etc.
- Installation and Operation of a wireless communication system for doing realtime monitoring

## Some General Examples

- Background of extensive research  
[http://www.esf.edu/hss/huntington\\_forest\\_research\\_overview.htm](http://www.esf.edu/hss/huntington_forest_research_overview.htm)
- Realtime data
  - [http://www.esf.edu/hss/em/huntington/data\\_map\\_click.html](http://www.esf.edu/hss/em/huntington/data_map_click.html)
- Archived data
  - <http://www.esf.edu/hss/em/huntington/archive.html>
- Cameras



## How does this interface with the Hudson River System?

- Potential of using information at the Huntington/Arbutus as a template for other research activities in the Adirondacks
- Used for undergraduate and graduate research and teaching.
- Linkage of Headwater Catchment responses (physical, chemical and biological) with downstream responses.
- History of strong collaboration with other institutions including USGS, EPA, U.S. Forest Service, Syracuse University, University of Delaware, Carey-IES, Clarkson University, University of Waterloo, University of Calgary, etc.