Agenda

- Overview of course
- Purpose of project
- How we gathered information
- Plans for next semester
- Questions and discussion
Our Class

- Made up of 6 Juniors and 1 Senior
- Some of our other projects:
  - Natural history
  - Analyzing/creating environmental impact statements
  - Literature review of land conservation topics
  - Easement monitoring for ASLPT
  - Geographic information system (GIS) skills
  - General study of land conservation
ASLPT Region
**NH Everlasting**

- Initiative of the Society for the Protection of New Hampshire Forests (SPNHF) to guide conservation in New Hampshire.

- Adopted by ASLPT
NH Everlasting

SPNHF’s main goal is to “conserve one million acres of our most significant natural lands within the next 25 years.”

- **5 Objectives:**
  - 25%
  - Active forest
  - Habitat
  - Water
  - Agricultural lands
Regional Investigation

To gather information on the 12 towns in the ASLPT region.

- 12 questions were asked for each town.
- Each question was answered through maps, charts, graphs, and text explanations.
- This information will assist us in determining conservation priorities for the ASLPT.

Newbury: High Meadow
Information Gathering

- Internet
- Tax maps
- Master plans
- Interviews with town officials
- Global Positioning Systems (GPS)
- Geographic Information System (GIS)
GIS Overview

A GIS is a computer system capable of assembling, storing, manipulating, and displaying geographically referenced information, i.e. data identified according to their locations.
GIS allows the user to overlay related information from different sources.
GIS Overview

- GIS also allows the user to analyze and manipulate the data.

- An example of this is undeveloped lands
Town of New London
Undeveloped lands
Regional Investigation
Overview

- Conservation
- Conserved lands
- Ecologically important land
- Population and housing
Support for Conservation

- Ten of the twelve towns in the ASLPT region address conservation within their town’s Master Plan
- These ten towns also have a conservation commission in town
- Only Danbury and Springfield have yet to address conservation within their Master Plan and create a conservation commission
Ecologically Important Lands

We used four methods to assess the Ecologically Important lands within the twelve towns of the ASLPT
Unfragmented lands are parcels of land that are not disturbed by roads and development.
The Forest Continuity Index is a measure of the amount of interior habitat that exists within a fragment.
FCI = Area/Perimeter = 226,757,519/147,833 = 1,534
Corridors

This map depicts waterways that act as corridors allowing wildlife to safely travel from one unfragmented parcel to the next.
Interior Habitat represents the parcels of unfragmented land buffered at 1000 feet.
Rate of Development

- The third question in the Regional Investigation examined the rate of development within the twelve towns.

- We used a combination of population growth and increase in housing units to analyze this question.
Population Growth

Year | New London | Wilmot | Springfeild | Sunapee
--- | --- | --- | --- | ---
1970 | 2000 | 1000 | 500 | 500
1980 | 2500 | 1500 | 1000 | 1000
1990 | 3000 | 2000 | 1500 | 1500
2000 | 3500 | 2500 | 2000 | 2000
Total Housing Units

Year


# of Housing Units

Goshen
Sunapee
New London
Wilmot
Plans for next semester

- Viewsheds
- Co-occurrence mapping
- Refine agriculture and forestry information
- Regional conservation priorities

Newbury: The Fells
Viewsheds

- Viewsheds show a specific point on a map and the surrounding areas which are able to view the point.
Co-occurrence

- Using the NH everlasting goals as a guide we can use GIS data layers to analyze the information that we collected to prioritize conservation, based on co-occurrence and rank according to importance.

- The co-occurrence of ecologically important lands, managed forests, and water resources.
More work on Agricultural and Forestry Land

- We will use current use documents and landcover maps to further analyze the actively managed land.
- We will ground truth our findings
- Determine what is important to ASLPT
Next semester we will compile all the data we have gathered and analyzed to identify regional conservation priorities.
Plans for communication

- Newsletter
- Report
- Maps
- Public presentation
Questions, Comments, Suggestions
Third year project students

Kris  Mike  Pete  Adam  Biz  Chris  Kerrie