How Service-Learning Can Support the Practice of, and Education About, Collaborative Natural Resource Management

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Background

• Collaborative Natural Resource Management (CNRM) is increasingly popular

• Many agree that social capital is critical to successful CNRM
Calls for NR professions to actively support the development of social capital in CNRM

Addressing these will require:
- Effective methods to develop social capital for natural resource goals
- NR students to be trained in those methods

Service-Learning may address both these needs
- Hands-on, collaborative, reciprocal
- Pervasive in NR programs
Is service learning a way to simultaneously construct social capital and teach NR students about successful CNRM?
Case study

- Harwood Union High School:
  - Located in South Duxbury, VT
  - Fuels for Schools Program facilitated switch to wood chips and interest in sustainable forestry
  - Owns 180 acre forest – no management plan
- Formed a partnership with UVM
Goals of the Harwood Union Forest Project

- Collaboratively write and implement a forest stewardship plan
- Develop forest-based education opportunities for Harwood Union students
Service-Learning Achievements

- Towards a stewardship plan:
  - Online survey of current use and desired future use
  - Forest inventory
  - Trail mapping
  - Establishment of long term forest health monitoring plots

- Towards increased forest-based education
  - Lessons/units in:
    - Forestry technical skills
    - GIS mapping
    - Forest pathogens
    - Watershed science
  - Workshop for teachers
  - Project Learning Tree
  - Tech workshops
Case Study Questions

- What role did service-learning play in the development of social capital among members of the Harwood Union Forest Project?

- How did participation in the project impact University of Vermont students’ understanding about collaborative natural resource efforts?
Methods

- **Data collection**
  - Participant observations – 16 months
  - Archival documents – meeting minutes, e-mails, student homework, student presentations
  - Interviews – 8 individuals closely involved with the Harwood Union Forest Project

- **Data analysis**
  - Thematic analysis – emic codes first
  - Chronological comparison

- **Member checking**
Limitations

- Single case study
  - Not generalizable
  - Hard to replicate
- Reflexive, participant researcher
- Less then two years of data – don’t know long term impacts
Preliminary Findings: Social Capital

- Increased “ties” among Harwood Union affiliates
- Increased “ties” between Harwood Union and UVM
- Increased “ties” between Harwood and other groups in the Mad River Valley
- Evidence of trust
  - Access to previously “guarded” materials
  - Shared decision making
Preliminary Findings: NR Education

- All university students described learning about collaborative NR projects
- Not all students made connection between what they learned and CNRM
- Most university students interviewed became interested in environmental education/community outreach as part of this project
Next Steps

- Finish analysis
  - Apply existing frameworks
  - Compare chronologically
- Member checking
- Write, write, write!
- Distribution
  - Academic journal article
  - Register with Conservation Almanac
Take Home Message

Food for thought:

• Should we, as NR educators, teach students about social capital development in collaborative natural resource management?

• Is service-learning one way for us to do that?
Thanks

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Questions?

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