

Networks as channels and conduits of learning in forest biodiversity conservation

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Combining biodiversity conservation and forestry

- Multilevel governance challenge
- Faces actors who
 - Design policy
 - Implement policy
 - Adapt to new policy
- Requires
 - Exchange of information
 - Expertise
 - Learning



Collaboration and networks in natural resource management

- Due to important implications for numerous stakeholders
 - Ownership, recreation, employment
- Open preparation of policy improves legitimacy
- Implementation benefits from broad participation
- Individual actors benefit from network membership
- **Networks are actually established to support policy design and implementation**



Project networks

Established to solve a particular problem

- Limited time and resources
- Risk: might lapse at the end of the project

→ Acquired competencies and established practices can dissolve – learning goes to waste



Policy networks

Working groups with a mandate or more informal coalitions

- Design policy
 - Risk: difficulty in dealing with new issues or issues that cross sectoral / administrative boundaries
- Might generate limitations to adaptive capacity and learning**



Routine networks

Actors utilize network ties to support their (core) functions

- To gain (e.g. profit, reputation, legitimacy)
 - Formal contracts – **conduits**
 - Informal open contacts - **channels**
- Learning and innovation are important for generating benefits through networks**



Conduits and channels

- Owen-Smith and Powell (2004)
- Conduits: contract-based formal information exchange
 - cf. strong/bonding ties
- Channels: informal information exchange open to all interested in accessing information
 - cf. weak/bridging ties

Integration of biodiversity conservation & Finnish forestry

- Concern for ecological sustainability → demand for multifunctional forestry
- Biodiversity conservation goals stated in Finnish Forest Act 1996



→ **Ecological concern coincides with increasing emphasis on openness and participation**

Organizational networks dealing with the integration challenge

- **Project networks:** Collaborative networks piloting new instruments of the Southern Finland Forest Biodiversity Programme (METSO)
- **Policy networks:** mediating between interests and improving the accountability of forestry in Regional Forest Programmes
- **Routine networks:** networks of forestry organizations supporting forestry, with an emphasis on biodiversity conservation





Formal ties

- **Project networks:** Formal project network was allocated funding to implement a plan
 - **Policy networks:** Forestry Council and Working Groups were established to prepare a Regional Forestry Programme
 - **Routine networks:** contract ties existed between actors involved in timber trade and formal monitoring of legal and certification obligations
- **Informal ties emerge and persist alongside and outside formal ties**



Data and samples

| | Project network | Policy network | Routine network |
|-------------------------|-----------------|----------------|-----------------|
| Year of data collection | 2005 | 2008 | 2006 |
| Nr of networks | 4 | 2 | 13 |

Organization

| | | | |
|------------------------|----|----|-----|
| Forestry Centre | 6 | 5 | 55 |
| Land owner | 2 | 2 | |
| Forest Mgmt. Assoc. | 3 | 1 | 111 |
| Env. authorities | 4 | 1 | |
| Industry | | | 132 |
| Nature NGO | 1 | 3 | |
| Forestry entrepreneurs | | | 13 |
| Education | 2 | 1 | |
| Total | 19 | 12 | 311 |

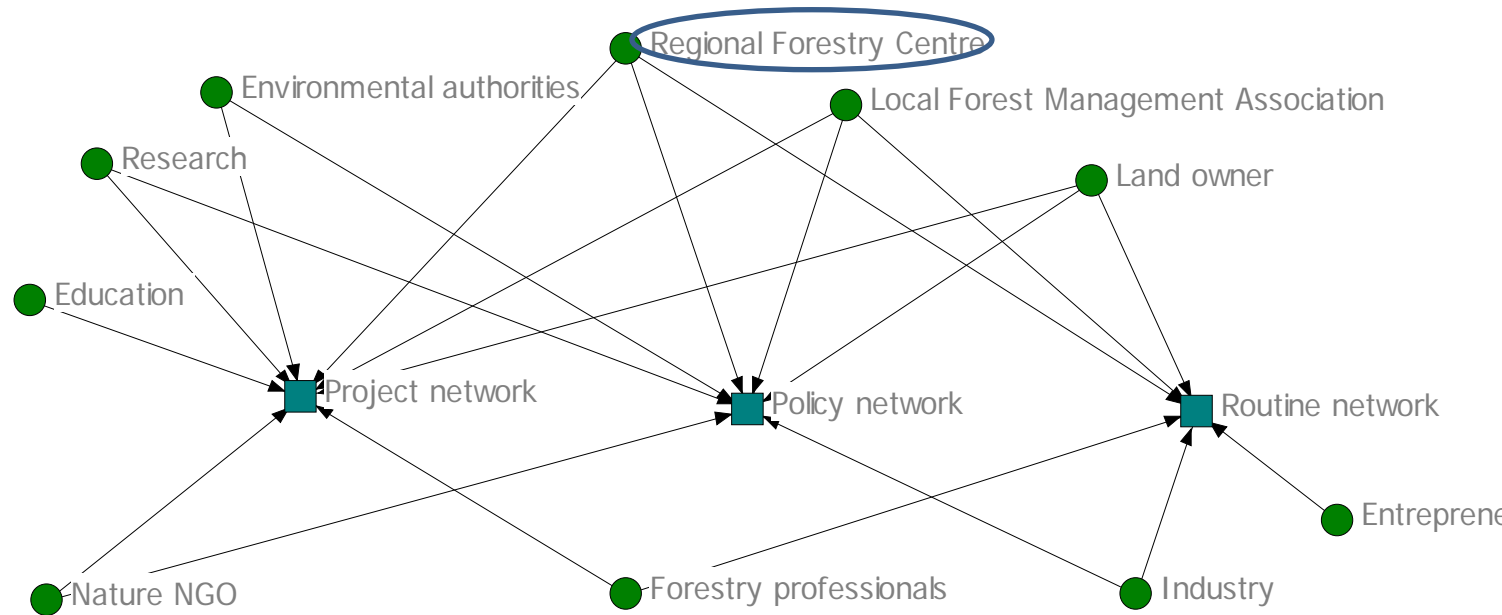


Points of interest: relationships

- Information exchange
- Appreciation
- Forum of communication
- Informal and formal ties

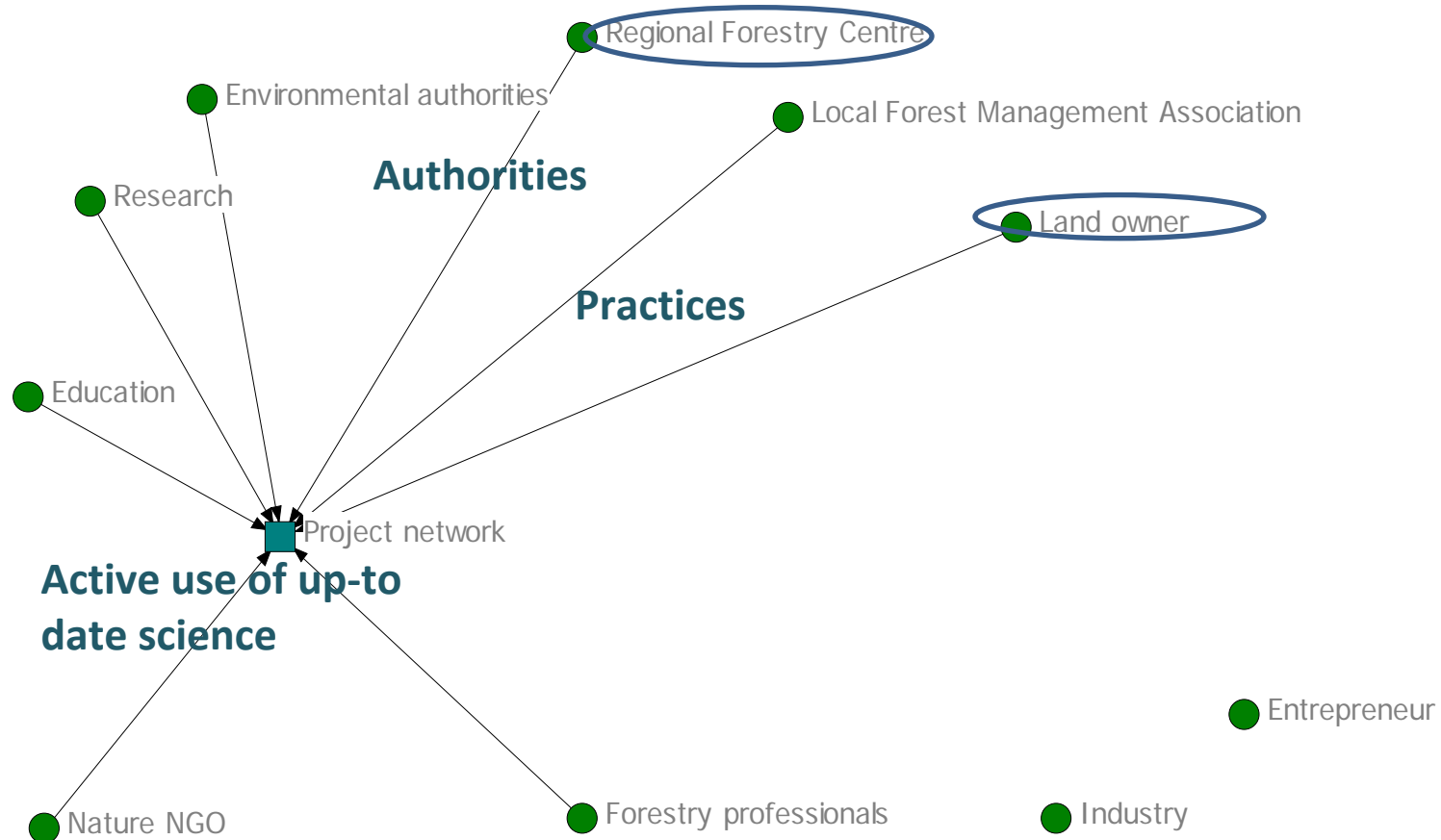
- **Structure of the networks**

Structure



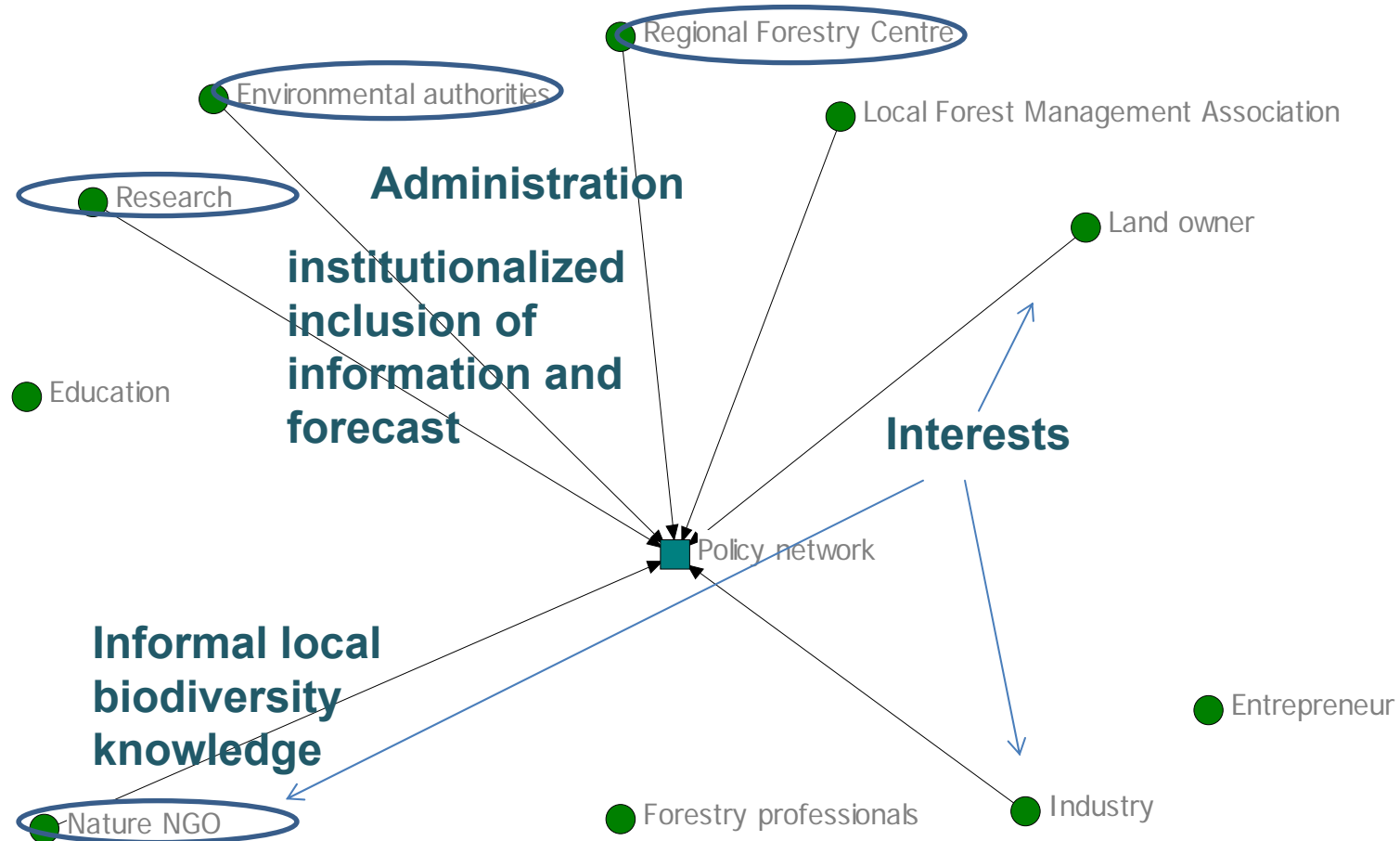
→ **Network of Finnish forestry organizations rather dense**

Structure: project networks



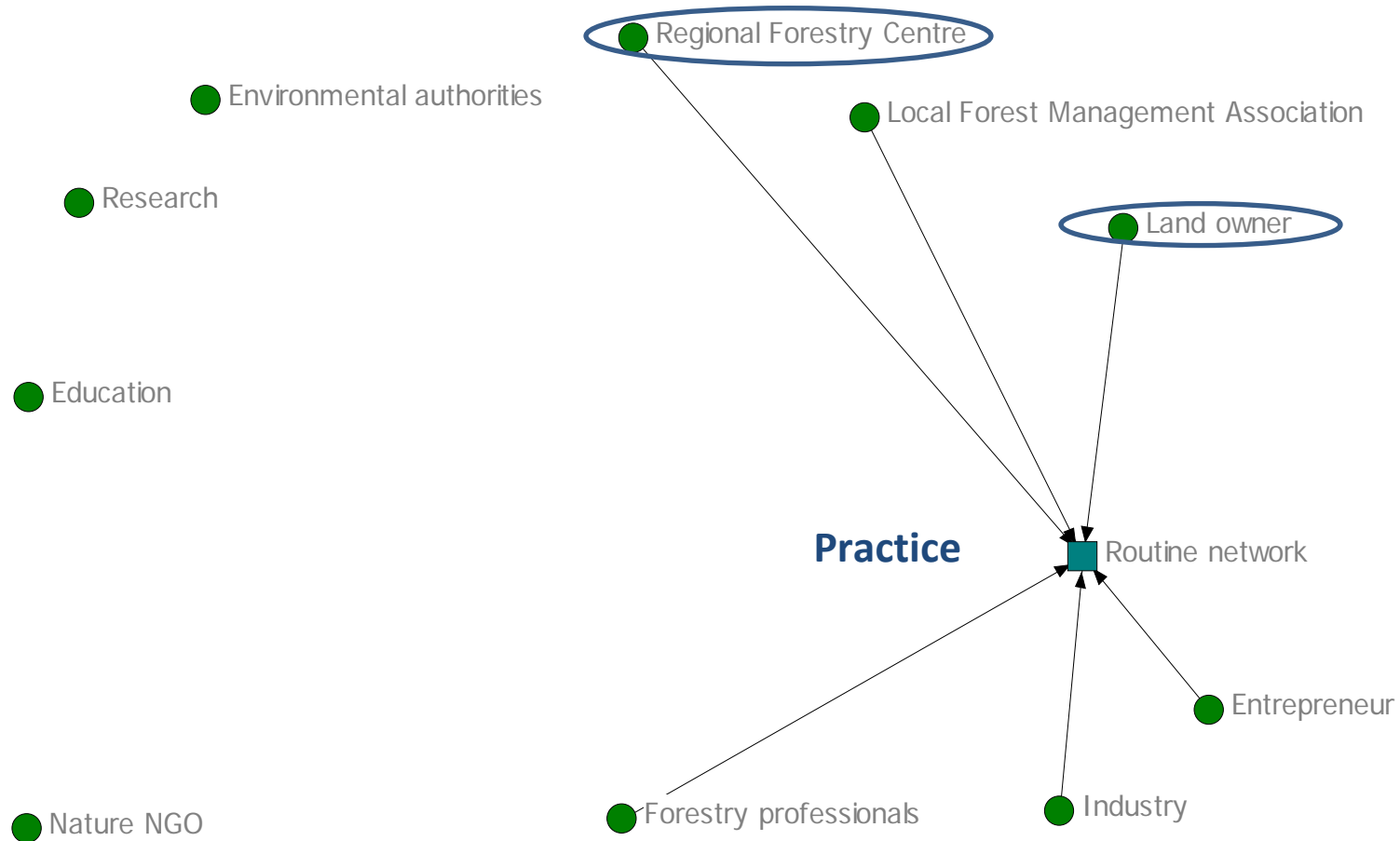
→ **Had most actors involved, momentum**

Structure: Policy networks



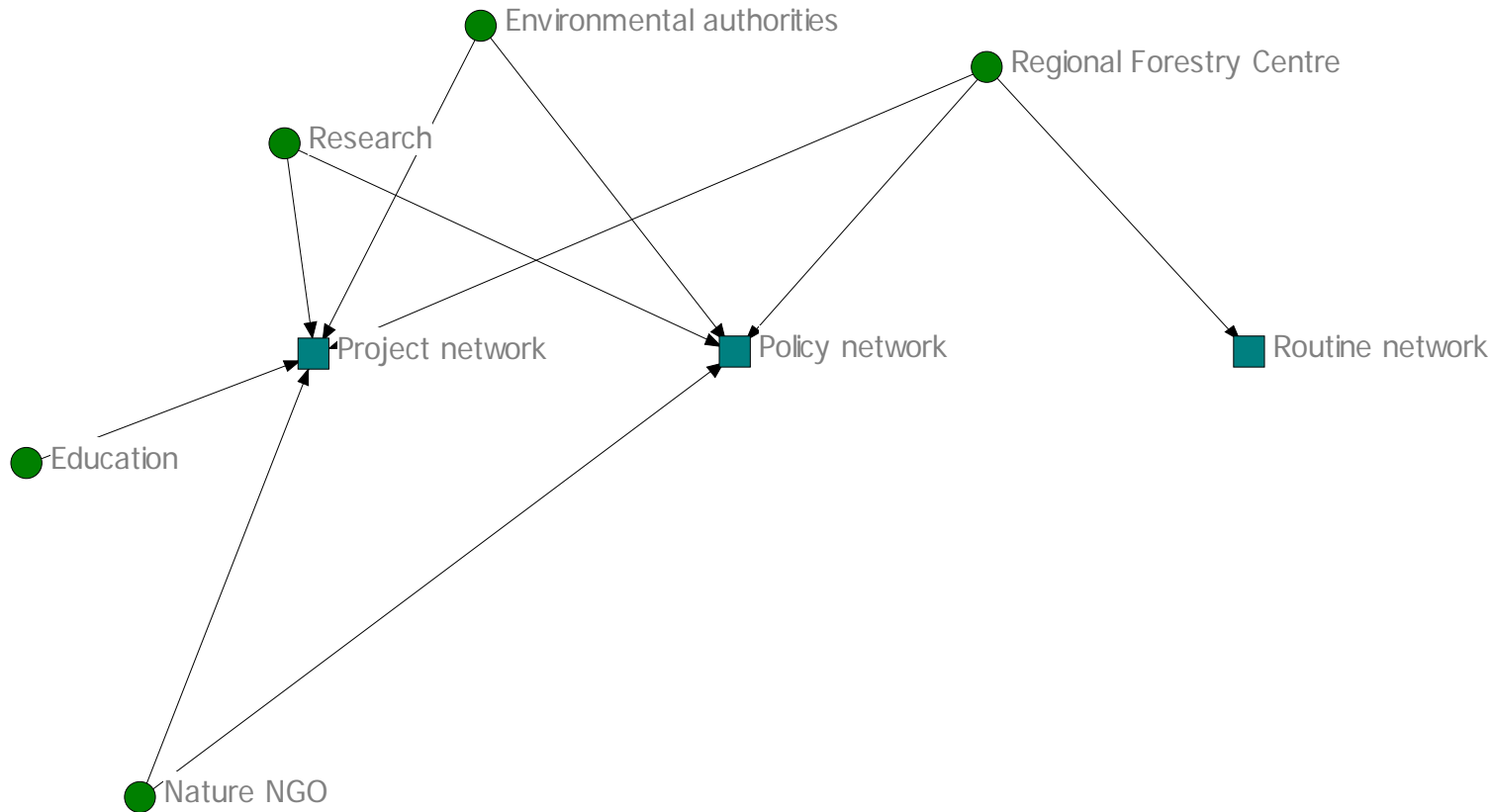
→ **Formal meetings and informal background work with existing contacts**

Structure: Routine network



→ **Broad range of stakeholders but biodiversity information exchange formal**

New knowledge about biodiversity



→ **Regional Forestry Centres: most valued information source**



Learning

- Up-to-date scientific understanding and practical field-level knowledge are largely disconnected
 - Adaptation logic differs in different networks
- The Central position of the Forestry Centres allows efficient information dissemination, but might constrain learning across administrative borders
 - But they have some informal contacts with e.g. NGOs

Formal and Informal ties: complementary

- Complementarity advances smooth dealing with issues
- Can also hinder tackling issues with very conflicting interests





Conclusion

- Formal contacts allow regularity of learning, but can potentially frame approaches in a constraining way
- Informal contacts support adopting practices and tackling problems that do not fall within administrative structures – they allow “spillovers”.



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Background

- Primmer E., Keinonen E. 2006. Yhteistoimintaverkostot - Etelä-Suomen metsien monimuotoisuusohjelman kokeiluhanke. Suomen ympäristö 45. Suomen ympäristökeskus, Helsinki.
- Primmer E. and Wolf, S. A. 2009. Empirical accounting of adaptation to environmental change: Organizational competencies and biodiversity conservation in Finnish forest management. In press. Ecology and Society.
- Primmer E. and Karppinen H. Professional judgment in non-industrial private forestry: foresters' attitudes and norms influencing their intentions to conserve biodiversity. Manuscript in review at Forest policy and Economics.
- Saarikoski H., Åkerman M., Primmer E. 2009. The prospects of collective action on forest policy: Preparing regional forest programs in Finland. Manuscript.