

Property rights and the allocation of common pool resources:

Non-timber forest products on public land in BC

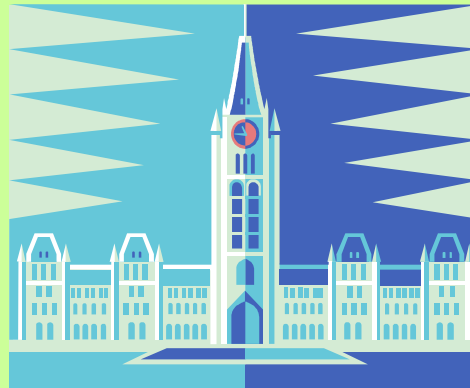
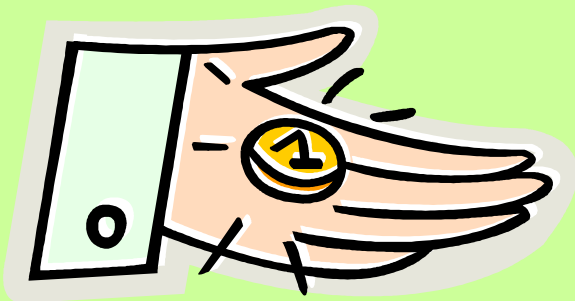


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Outline of presentation

- Purpose of research
- BC NTFP characteristics
- The problem?
- BC case study
- Case study subjects
- Preliminary results



Purpose of study

- Part of a larger research project looking into the role of tenure in sustainable forest management
- Research question: what role does tenure, or more broadly property rights play in the sustainable management of NTFPs?
- Alternatively, are conditions in B.C. conducive to creating appropriate incentives through property rights?
- Results will help to clarify the need for and design of institutions to manage NTFPs on Crown or public land
- Are current approaches to providing NTFPs the most appropriate?

Characteristics of NTFPs in BC

- Heterogeneous sector
- Over 200 species identified
- Commercial and non-commercial users
- Predominantly open access – no permits/tenure
- Domestic and export markets
- BC sales revenue: CDN\$ 280 million (?)
- Employs some 30,000 F-T & P-T (?)
- Volumes harvested:
 - EWM 400 – 1,000+ tonnes?
 - Salal ?
 - Boughs ?
- Harvest location and impact of harvest (?)
- Uncertainty?



Is there a problem in BC?

- What do we know?
 - ❑ 63 million hectares of forested land
 - ❑ Myriad of timber, trapping, recreation tenures
 - ❑ NTFPs are under open access in most areas
 - No permits, no rules or responsibilities
 - No specific NTFP tenures
 - ❑ NTFPs are common pool resources
 - Exclusion costly
 - Rivalrous
 - Difficult to divide
 - ❑ Rents exist
 - ❑ Over-exploitation of resource?



Theory suggests...

■ Market failure

- ❑ Poorly defined property rights – open access: over-exploitation, rent dissipation, resource ruin
- ❑ Public goods nature of common pool resources
- ❑ Transaction costs: Information, Cooperation, Enforcement
- ❑ Assigning rights assumes the ability to exclude and the existence of scarcity, congestion, and resource rents

■ Institutional failure

- ❑ Role of the state
- ❑ Establishing rights, rules and responsibilities
- ❑ Break in constitutional-collective-operational choice rules
- ❑ Commercial versus non-commercial

Methodological approach

- **Deductive perspective**
 - ❑ Provision of and investment in NTFPs
 - ❑ Definition of property right elements
 - ❑ Information availability and cost
 - ❑ Established rights, rules and responsibilities
 - ❑ Indicators of over-harvesting/dissipation of rent
 - ❑ Minimization of trespass or free riders

- **Inductive perspective**
 - ❑ Locational characteristics and variances
 - ❑ Prescriptive versus entrepreneurial
 - ❑ Homogeneity of user rights
 - ❑ Land adjacency influences
 - ❑ Public access ethic
 - ❑ Investment funding sources
 - ❑ Value (market or non-market) of NTFPs

BC as a case study of NTFPs and property rights regimes

- Wide range of property rights to investigate
 - ❑ Open access
 - ❑ Tenured rights
 - ❑ Private land
 - ❑ First Nations Treaty Land
 - ❑ Common property (?)



Case studies

- Community Forest Agreement Tenures
 - 11 CFAs, 264,000 ha in total, ranging from 400 ha to 60,000 ha. Only Crown tenure to include NTFPs.
- Open access Crown/public land
 - ≈ 30 million ha within timber harvesting landbase
- North Cowichan Forest Reserve
 - Market logger with 5,344 ha.
- TimberWest
 - Industrial timber producer with 335,000 ha on Vancouver Island

Community Forest Agreements

- Speak to multiple values but tenure still timber focused
- NTFPs included in tenure if desired
- Many CFAs interested in NTFPs, but
 - Timber planning requirements
 - No NTFP inventory – costly to undertake
 - Low value NTFP area
 - Lack of market information
 - Adjacent land open access
 - Cost of development given market uncertainty
- Permit others to access CFA
- Harrop-Procter is an exception
- Other values, archaeological for e.g., included in development planning – NTFPs usually omitted



Open access public land

- No *de jure* rights, rules or responsibilities for the use of NTFPs
- Some government research investment into pine mushroom habitat, berry, market and institutional aspects
- No access restrictions other than parks
- Significant \$ value
- No permitting or collection of fees or rents
- No information collected
- Over-harvesting: uncertain to government. To users?
- Are there *de facto* common property systems of rights and rules?
- Wide range of user knowledge



North Cowichan Forest Reserve

- Timber focused market logger
- Provides unlimited NTFP access to permit holders other than in watersheds
- Permit fees: \$60/month/person = total value about \$1500.
- Collects no information on volumes and values
- Lacks resources to investigate or further develop potential
- Interest and value in NCFR lands gauged by number of permit requests, not by value of product
- Skeptical of value to community shareholders
- Enforcement issue precludes exclusive contract
- Liability issues associated with exclusive contract

TimberWest

- Until recently provided access to land via permit
- Over-harvesting led to exclusive contract for one company
- TW does not collect volume and value information
- Dealt with liability issues – passed on to contractor who must ensure appropriate WCB, taxes etc. paid
- Not interested in pursuing for own business, difficult for NTFPs to compete with \$80million/yr in shareholder disbursements
- Low NTFP margins
- Current method may be most efficient method for land owner to provide resource
- Lessons for the public land owner?

Private – public open access continuum

- Private
 - ❑ Provides access via permits
 - ❑ Not interested in developing NTFP business
 - ❑ No investment in NTFP resource
 - ❑ Not lucrative enough for timber oriented company
 - ❑ Over-harvesting? In some areas yes
- Public
 - ❑ Crown provides free access – limited tenured access
 - ❑ Public expectation of free access
 - ❑ Unsure how to tenure or permit NTFP use
 - ❑ Marginal investment in NTFP resource
 - ❑ The more valued are NTFPs, the more they are incorporated within timber management
 - ❑ Over-harvesting? In some areas yes

Summary of NTFP tenure characteristics

- Tenure structure
 - Timber focus overwhelms NTFPs
 - Degree of focus relative to the available rents
 - Privatness does not lead to private maximization of rents
 - Optimal use \neq single use ... society seeks other uses
 - Nested levels of use
- Resource and institutional conduciveness
 - Tenure cannot evolve and maintain itself
 - Institutional elements
 - Homogeneity across landscape as necessary
 - NTFP focused
 - In some areas, multiple NTFP species, not single species/product
 - State support – information, enforcement
 - Protection of non-commercial values

NTFP tenure design

- Appropriate allocation
 - Can timber companies be expected to incorporate NTFPs into timber management?
 - Those who will invest in the resource are those who will reap the greatest benefits, i.e., the users
 - Not all NTFPs are conducive to tenure, e.g., edible wild mushrooms
 - Common pool non-exclusivity may limit effectiveness of tenure options
 - Local versus non-local participants

NTFP tenure design

■ Nested tenures

- Allocating resources to those who derive the greatest benefit from them
- NTFPs have both competing and complementary relationship to timber – may be amenable to nesting
- Nesting can occur within NTFP sub-sectors and across sectors
- Government, NTFP industry, timber industry must collaborate with First Nations

- But, does anyone want this or any other model?

Questions?
Suggestions?

MUSHROOM
BUYER

