

Selected Sources on Community Forestry in Canada: An Annotated Bibliography



by

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Preface

This annotated bibliography serves as an updated version of *Community Forestry in Canada: A Selected Annotated Bibliography* (2015), as a collaborative and continuing piece on the state of community forestry in Canada. This document offers annotations of various academic sources from 2008 to 2022 and contains a complete bibliography of community forestry in Canada dating back to 1935. This collection of sources aims to provide an overview for researchers, students, communities, organizations, and decision-makers regarding the historic and current developments of community-based forestry in Canada. All 40 annotated sources were selected based on criteria that the authors thought best reflect the concepts, practices, and models of community forestry. Areas of focus within this document are co-management practices, collaborative governance, community involvement, corporate and political implications, capacity building, the value of Western and Traditional Knowledge, and climate change adaptation. As the socio-economic, environmental, and political spheres continue to shift, research relating Indigenous, Inuit, Metis, and settler involvement in forestry relations advance the dialogue regarding reconciliation, sovereignty, inequity, and Canada's changing natural environment.

We hope that this document is found to be a useful resource for anyone interested in community forestry and we greatly appreciate the efforts of all contributors, funders, cited authors and community members.

Annotated Bibliography: Community Forestry in Canada 2008-2022

Annotations are in order of newest to oldest publications

Kant, S., & Vertinsky, I. (2022). The anatomy of social capital of a Canadian indigenous community: Implications of social trust field experiments for community-based forest management. *Forest Policy and Economics, 144*, 102822.
<https://doi.org/10.1016/j.forpol.2022.102822>

This paper is written in response to gaps in the literature on the motives behind social trust as well as its relation to First Nations peoples in Canada. Social trust is the ability to believe in the good faith of others, leading to an increased level of receptiveness to collaboration, strengthened relationships, and increased social capital. The aim of this paper is: 1) to create a framework to analytically measure influences and patterns of social trust amongst First Nations peoples in Canada; 2) to define the sources that influence trust within First Nations peoples in relation to social capital within a community, specifically regarding age and gender; and 3) to utilize data to create “community-based co-management systems of forest resources in First Nations communities” (p.2). The authors compiled qualitative data through the use of a survey in a reserve in Ontario, Canada, as well as through the use of games to conduct fieldwork aimed at compiling one's willingness to trust others within a community. The surveys were used to gain demographic data and information on trust, and the games were used to observe a person's motives behind the willingness to trust or lack of trust toward others. Results showed that: 1) researchers were successfully able to create a framework to measure social trust; and 2) when compared to non-Aboriginal peoples, there were high levels of social trust within the community. This can be related to characteristics of generosity and reciprocity, which lead to better co-management and conservation within the community-based forest system. Results also showed: 3) low levels of trust in outsiders of the community; 4) high levels of trust were present towards Elders leading researchers, highlighting the importance that Elders are given a role in co-management systems that reflects their decision-making roles in the community; and 5) women saw higher levels of trust than men - researchers recorded that culture and tradition played a strong part in this. Two gaps were highlighted by the authors: 1) increased support and involvement of Aboriginal peoples in forest co-management systems are crucial to building trusting relationships; and 2) high levels of trust in Elders and women led researchers to highlight the importance that these groups are given a role in co-management systems that reflect their decision-making roles in the community.

Persaud, A. W., Nelson, H. W., & Satterfield, T. (2022). Reconciling institutional logics within First Nations forestry-based social enterprises. *Organization & Environment, 35*(3), 394-413. <https://doi.org/10.1177/10860266211042659>

Indigenous forestry-based social enterprises aim to address the socioeconomic needs of a community through an Indigenous lens, yet these enterprises still encounter the conflicting influences and demands of various institutions and the global market. The purpose of this paper is to: 1) evaluate how the First Nations community sawmill enterprises (FNCSE) in British Columbia (BC) navigate conflicting values amongst various institutional logics. Institutional logics are the sociocultural constructs that affect how individuals and institutions hold beliefs,

practices, values, and assumptions about the world around them. Indigenous logics focus on achieving overall well-being through sociocultural, spiritual, and land-based relationships, and the utilization of a social enterprise helps combat these outside pressures. Through the use of a literature review and interviews with members of the FNSCE, the authors compile qualitative data on institutional influences, social enterprises, and the FNCSE. Three categories of logical tension were used in the analysis: 1) operational is the process of meeting institutional demands; 2) organizational is the relationship between governance and institutional structures; and 3) motivational is the goals and purposes of the FNSCE. The authors concluded that: 1) the largest area for tension was between community values and business values; 2) operationally, the goal to prioritize greater socio-economic well-being in the FNSCE is achieved through the decision to compromise business values for community values - authors highlight that this resulted in below-market level profits, but by achieving the social goals the FNSCE was able to obtain financial subsidies; 3) organizationally, tensions arose through dual ownership between communities and corporations amongst FNSCE leading to inefficiencies, and inter-community conflicts - authors noted that when bands owned the social enterprise, the social goals were more commonly attained; and 4) motivationally, tensions arose through the conflicting but positive relationship between financial gain and greater self-determination. This was combated through the enterprise deciding to sell their stumpage rate to a larger company to maintain revenue and protect community values. Areas for future research highlighted are: 1) utilizing other forms of economically viable natural resources projects to observe how they are affected by various conflicting institutional logics.

Devisscher, T., Spies, J., & Griess, V. C. (2021). Time for change: Learning from community forests to enhance the resilience of multi-value forestry in British Columbia, Canada. *Land use Policy*, 103, 105317. <https://doi.org/10.1016/j.landusepol.2021.105317>

The effects of climate change and anthropogenic disturbances have been altering Canadian forest ecosystems and will continue to threaten local people and biodiversity alike. As over half of British Columbia (BC) is forested land and has a long history of community forests, there is a call for an adaptive forest management model to increase resiliency against these pressures. This multi-case study aims to: 1) close the gap in the literature regarding how community forestry (CF) can help achieve social and ecological resiliency using local values in the face of climate change. The study occurred in partnership with the BC Community Forest Association (BCCFA) and utilizes quantitative data from BCCFA surveys from community forest members and qualitative data drawn from interviews with CF managers. The results conclude that: 1) CF managers began to make adaptive decisions related to the effects of climate change such as seeking a variety of drought-resistant species and prioritizing wildfire management; 2) the use of participation increased social capital and resulted in an increased awareness of climate change from the CF and surrounding communities; 3) new acknowledgement of different values and perspectives through shared goals was deemed important by managers which further strengthened relationships through trust and capacity building within community forests and surrounding communities; 4) utilizing silvicultural strategies help achieve greater resilience; and 5) forest management strategies focused on long-term goals. A gap to explore for future research is: 1) to replicate this study in other areas, for example, strategies aimed at minimizing wildfires on landscape levels will require increased collaborative management with different knowledge systems i.e., traditional knowledge, and public education. Other gaps are: 2) how to encourage

large-scale forest licensees to increasingly utilize silvicultural practices; and 3) there is a need for further studies intertwining forestry literature and natural sciences with community forestry research.

Pinkerton, E., & Rutherford, M. (2021). Evaluating British Columbia's Municipally Owned Community Forest Corporations as Governance Structures. *Environmental Management*, 67(1), 1-11. <https://doi.org/10.1007/s00267-020-01384-4>

The introduction of the 'Community Forests Agreement' of 1998 welcomed greater decision-making powers over a community forests governance structure to better suit individual community values and local landscapes. The purpose of this paper is to: 1) examine the costs and benefits of the most commonly used governance structures in community forests (CF) of municipally owned corporations (MOC) in British Columbia (BC); 2) through the use of case studies, analyze how MOC CFs act in the best interest of both their community and province; and 3) examine the settings and characteristics needed to facilitate proper co-management practices. MOCs are said to allow for greater autonomy, offer tax benefits, reduce liability, and act according to public interests and long-term goals. The authors collected qualitative data by conducting a literature review, attending community meetings, utilizing focus groups, and conducting interviews with five CF communities and various CF of MOCs in BC. The interviews concluded that: 1) the first MOC lacked transparency, accountability, and did not act in accordance with community values. Management severely lacked expertise on forestry matters, leading to public distrust and outrage at a community level and from local Indigenous communities resulting in litigations; 2) the first MOC also failed to demonstrate proper co-management practices such as signaling a call for audits for the Ministry on management; 3) the second and third MOC demonstrated transparency, accountability, and acted in accordance with the community values – they both also demonstrated high levels of expertise, cost-effectiveness, and maintained positive relationships with local Indigenous communities as well as the Ministry; 4) the second and third MOC both displayed exemplary co-management practices; and 5) the authors highlighted ten practices to help CFs improve upon co-governance structures; 5.1) transparency, accountability, and communication; 5.2) cognizant of politicization; 5.3) report to both the public and the board; 5.4) balance business and community interest; 5.5) ensure significant forestry expertise of management; 5.6) ensure significant industry expertise; 5.7) cognizant of wages and costs; 5.8) encourage both volunteer and paid work; 5.9) balanced distribution of benefits; and 5.10) balanced benefits and engagement with local Indigenous peoples.

Siegner, M., Panwar, R., & Kozak, R. (2021). Community forest enterprises and social enterprises: the confluence of two streams of literatures for sustainable natural resource management. *Social Enterprise Journal*, 17(4), 584-603. <https://doi.org/10.1108/SEJ-10-2020-0096>

The authors describe community forest enterprises as “hybridized organizations” (p.585) aimed at achieving social equity through local reinvestment and attaining a profit regarding local resource management and forestry endeavors. The purpose of this paper is: 1) to address the obstacles regarding the management of community forest enterprises; and 2) to develop a comprehensive plan to surmount these obstacles with the use of literature on social enterprises.

The study utilizes qualitative meta-synthesis by conducting a literature review amongst community forest enterprise (CFE) literature with social enterprise literature. Results demonstrate that: 1) while CFEs vary greatly around the world, they aim to address these central goals: to alleviate poverty, revitalize rural areas, ensure forestry practices are environmentally conscious, and acknowledge Indigenous rights; and 2) CFEs present challenges in achieving both social equity and economic gain whereas social enterprise literature demonstrates solutions to said problems: 2.1) being prosperous in the market whilst retaining values is a challenge but finding common values amongst foreign partners helps; 2.2) conflict arises between decision-making bodies and restructuring roles can alleviate this; 2.3) the use of mixed funds can help lessen the threat to social values when expanding a business; and 2.4) disclosing results on short-term business gain threatens long-term social and environmental goals however finding social and environmental measures of success help. The authors highlight two gaps for further exploration: 1) identify what level of improvement and what factors of social enterprises contribute to social and environmental outcomes; and 2) analyze how the use of CFEs could be used to further affirm previous research on social enterprises.

Egunyu, F., Reed, M. G., Sinclair, A. J., Parkins, J. R., & Robson, J. P. (2020). Public engagement in forest governance in Canada: whose values are being represented anyway?. *Canadian Journal of Forest Research*, 50(11), 1152-1159.
<https://doi.org/10.1139/cjfr-2020-0026>

Forest Advisory Committees (FAC), the most widely used model in Canada, and community forestry boards (CFB) are utilized to inspire public engagement in sustainable forest management (SFM). FACs are made up of various public stakeholders aimed at advising forestry companies but lack overall decision-making capabilities and do not provide a basis for local people to build capacity. Community forests do have decision-making capabilities but are constrained by having to follow government protocols. This paper aims to: 1) discover if there are any significant distinctions of values or community representation between CF models and FAC models of governance. Representation refers to the level of shared values, interests, and lived experiences, such as race, gender, or ethnicity, that representatives of the community at hand have. The methods used in this study were questionnaires distributed to FACs and CFBs to gain qualitative data on classification relating to one's age, gender, and education status, and opinion-based questions regarding either governance model. Regarding demographics, both models report that: 1) questions surrounding values, age, gender, and education classification had no significant difference between FAC and CFB; 1.1) 21% of respondents were women; 1.2) 80% of respondents had higher than secondary school levels of education; 1.3) respondents were predominately older white males; and 1.4) the organizations lacked representation of various groups i.e., Indigenous & Métis. Data from opinion-based questions report that: 2) utilizing either method to inspire public participation did not lead to increased diversity of representation of all groups of people. Gaps for future research are: 1) to measure how utilizing different forums could lead to increased representation; and 2) how a further study of the models utilized could lead to missing data i.e., how governmental pressure influence data. The authors conclude that both FAC and CFB must work toward better representation and meaningful engagement with women and Indigenous peoples through strengthening relationships and capacity building.

Hotte, N., Wyatt, S., & Kozak, R. (2019). Influences on trust during collaborative forest governance: a case study from Haida Gwaii. *Canadian Journal of Forest Research*, 49(4), 361-374. <https://doi.org/10.1139/cjfr-2018-0222>

The Haida of Haida Gwaii in British Columbia have obtained greater authority over local lands and resources leading to an exemplary system of collaborative governance. Collaborative governance works towards remedying land and resource conflicts by allowing for greater decision-making, traditional knowledge integration, public participation, and building trust amongst actors. The aim of this study is: 1) to analyze trust regarding collaborative governance of natural resources between Indigenous and non-Indigenous governance systems; and 2) to evaluate the influence institutions, relationships, and individuals have on trust. Through the use of case studies and interviews with both Haida and provincial representatives, researchers were able to compile qualitative and quantitative data to measure “the trust-building process”. An equal number of representatives from both the province and the Haida were utilized in the case study drawn from the Haida Gwaii Management Council, their decision-making body, and the Solutions Table, which mobilizes the acts to consult and accommodate. Results showed that: 1) both governmental bodies reported low levels of conflict resolution; 2) the Haida Gwaii Management Council positively viewed the use of joint decision-making in regard to building trust and saw higher levels of trust motivated by institutional influences; 3) the Solutions Table saw higher levels of trust motivated by relationships; 4) individual influences on trust were described as discrimination, inequities, and trauma, lived experiences, one’s values, faith in humanity, and emotions; 5) interpersonal influences on trust were characterized as integrity, the good nature of others, sufficient ability, emotion and bonding; and 6) institutional influences on trust were defined as shared interests, institutional support, decision-making fairness, flexibility, responsiveness and transparency. Areas identified for further research were: 1) to replicate this study with the inclusion of the Haida community members to measure public trust; and 2) for researchers to use surveys to test the universality of the results on trust and influences within Indigenous peoples in Canada regarding enacting collaborative resource governance.

Lawler, J. H., & Bullock, R. C. L. (2019). Indigenous control and benefits through small-scale forestry: a multi-case analysis of outcomes. *Canadian Journal of Forest Research*, 49(4), 404-413. <https://doi.org/10.1139/cjfr-2018-0279>

The Forest Act of Canada enables Indigenous, Metis, and Inuit communities residing in regions with low employment rates or socio-economic disadvantages to access Community Timber Allocations. This allows these communities to engage in commercial or local harvesting of timber, aiming to secure employment opportunities and enhance the well-being of their respective communities. The aim of this study is: 1) to determine if the Community Timber Allocations (CTA) program accommodates both provincial and community goals by measuring the various levels of control and benefits. Through the use of a multi-case study of The Manitoba Metis Federation (MMF), The Opaskwayak Cree Nation, and The Shoal Lake 40 First Nation (SL40), interviews, documents on the cases and the CTA program were analyzed from 2005 to 2018 to gain qualitative and quantitative data. Researchers analyzed data through an evaluative framework modified from Forsyth (2006) and Ambus and Hoberg (2011), noting three levels of decision-making: 1) strategic decisions aim to respond to long-term goals guiding tactical and operational goals such as community values; 2) tactical decisions aim to respond to medium

goals regarding conflicts, management, and evaluations; and 3) operational decisions aim to respond to daily dilemmas such as planning, manufacturing, and directing forestry practices such as employment. The evaluative framework was designed to measure the level of benefit of: 1) capacity building; 2) public engagement; and 3) the environment. The researchers concluded that: 1) peak years of CTA use were 2007 and 2009; 2) barriers related to policy and regulations led to a lack of strategic or tactical decision-making through the CTA yet, authors noted that these areas of control may have been fulfilled through different Manitoban resources; 3) operational decision-making helps build community capacity and strengthens inter-forestry relationships; 4) community goals were being met through the use of the CTA but authors note that biases may be present; 5) high levels of engagement led to strengthened relationships as well as economic capacity building and opportunities which demonstrated contributions to the goals of the province; and 6) CTA resulted in low levels of environmental benefit, as any environmental benefit noted were determined to not be a direct cause of the CTA. Gaps and recommendations include: 1) incorporating the involvement of the communities at hand on all levels of the research process to encourage the creation of culturally appropriate criteria assessments specific to each community; 2) analyzing similar types of tenures across the Canadian prairie provinces could be useful to gauge issues and benefits with various forms of tenure; and 3) conducting further research on the CTA program to better understand how small-scale forestry can aid in mobilizing Indigenous forestry.

Nelson, H., Nikolakis, W., & Martin-Chan, K. (2019). The effect of institutional arrangements on economic performance among first nations: Evidence from forestry in BC. *Forest Policy and Economics*, 107, 101922. <https://doi.org/10.1016/j.forpol.2019.05.008>

The recognition of past and ongoing socio-economic inequities faced by the Indigenous peoples of Canada has resulted in greater Indigenous self-determination and the reclamation of land through participating in resource development. As the allocation of rights regarding access to forestry initiatives for Indigenous communities aims to provide socio-economic benefits, a lack of research on the success and deliverance of this approach has been highlighted. The objectives of this paper are: 1) to analyze how community-based timber-cutting profits are influenced by community-based decisions; and 2) to assess how the various factors regarding timber rights affect the possible socio-economic outcomes such as the region and condition of timber, institutional decisions, and community attributes. The authors used various criteria to assess harvesting determinants for two types of tenures, area, and volume, such as the use of stumpage, incentives to maximize the set allowable annual cut (AAC), community distance to the closest market, community population size, and type of community government. The data used in this study includes qualitative data gained from government documents and data from the BC Ministry of Forests on First Nation tenure holders in British Columbia (BC). The researchers conclude that: 1) data signals strong associations between the type of tenure used and the attributes of the timber used to the financial outcomes; 2) harvest performance is shown to increase with area-based tenures, yet volume-based tenures are more widely used by First Nations communities; 3) increased harvesting positively correlates with high rates of stumpage; 4) the increasing size of a community's population negatively correlates with harvest performance leading authors to speculate that the lack of community support may be the cause; and 5) institutional factors positively influence performance, e.g., when First Nation communities made institutional changes, greater harvesting levels were reported. The authors

hypothesize that this may be due to increased community support both physically and socially or that this decision led to an increase in outside partnerships resulting in greater resource access. An area noted for future research is: 1) to analyze how other factors such as policy influences may play a role in some First Nations communities missing opportunities for further forestry-related economic development.

Palaschuk, N. & Bullock, R. (2019). Achievements in Aboriginal forestry research: Claims, evidence and opportunities. *Small-scale Forestry*, 18(2), 213-234. <https://doi.org/10.1007/s11842-019-09415-7>

The objectives of this paper are: 1) to work towards closing the gap in Aboriginal forestry literature by identifying trends in the current literature; 2) to discern gaps amongst literature; and 3) to disclose opportunities that will benefit future Aboriginal forestry research. Aboriginal forestry aims to adopt Aboriginal values, interests, and Traditional Knowledge into forestry practices and decision-making through Aboriginal-led initiatives. The methodology used for this study is a bibliometric analysis of Aboriginal forestry from 1994 to 2015 through the use of a search protocol amongst online databases. Three main testable claims within Aboriginal forestry literature were used by researchers to better understand trends: 1) “Aboriginal forestry” as a term is growing in research; 2) Aboriginal forestry research is collaboratively being done “with” instead of “on” Aboriginal communities; and 3) Aboriginal forestry is being increasingly analyzed. Results showed that: 1) the term “Aboriginal forestry” is growing in popularity yet not consistently as 51% of papers were published between 2011 and 2015; 2) although challenges to co-management such as Aboriginal distrust of government or the improper understanding and use of Traditional knowledge by Westerners are present, data showed an increase in research “with” Aboriginal communities. Researchers note that this must be increasingly done to help build collaborative relationships; and 3) Aboriginal forestry is being increasingly analyzed while highlighting that this may be due to changes in the social and political spheres, or to an increase in Aboriginal capacity building and environmental perceptions. Two gaps were presented by the authors: 1) research needs to distinguish Aboriginal forestry as a field separate from general Aboriginal participation in forestry; and 2) there is a need to analyze the growth of support to Aboriginal forestry from funding bodies.

Pinkerton, E. (2019). Benefits of collaboration between Indigenous and non-Indigenous communities through community forests in British Columbia. *Canadian Journal of Forest Research*, 49(4), 387-394. <https://doi.org/10.1139/cjfr-2018-0154>

Community forestry (CF) makes up a minuscule amount of forest tenures in British Columbia (BC), while the largest timber companies hold the majority and dominate the timber market. CF tenures grant greater freedom of decision-making and socio-economic benefits within their jurisdiction but are constrained under the BC Ministry of Forests. The objective of this paper is: 1) to assess and increase the level of benefit drawn from collaboration between Indigenous and non-Indigenous communities in CF. This study compiled ethnological data with CFs and stakeholders, analyzed the British Columbia Community Forest Association (2016) study on the benefits of CF, and measured the level of involvement local Indigenous groups have in forestry projects in BC. The researcher concluded that: 1) collaboration helped build knowledge and strengthen relationships that benefited Indigenous CFs; 2) collaboration led to higher chances of

obtaining tenure, leading to future increase in capacity and community involvement; 3) non-Indigenous CFs benefited from collaborations which helped to increase capacity in communities that lacked; 4) Indigenous and non-Indigenous communities agreed upon building local infrastructure such as bridges to benefit both while offering a variety of skill and knowledge sets; 5) increased political assets through partnerships were highlighted and could allow for greater annual allowable cuts through CF land expansion; and 6) further benefit for all CFs were steps towards reconciliation and recognition of the rights of Indigenous peoples in BC. The author highlights that co-management practices between Indigenous and non-Indigenous communities lead to an overall increase in community decision-making. A gap presented by the author is: 1) to mimic this study on a larger scale to validate the findings. As Wyatt (2008) and the BCCFA (2016) study found 9 indicators of benefits of collaborating, Pinkerton notes five additional indicators drawn from this study: 1) Indigenous communities recovered access to their traditional lands; 2) increased amicableness between Indigenous and non-Indigenous communities; 3) both communities were more open to future cooperative endeavours due to mutually increased capacity and trust as the result of education workshops; (4) forest practices began to indicate the use of Indigenous values; and 5) increased willingness to expand upon CFs by Indigenous communities.

Sinclair, A. J. (2019). Unravelling the relationship between collective action and social learning: Evidence from community forest management in Canada. *Forests*, 10(6), 494.
<https://doi.org/10.3390/f10060494>

The purpose of this study is: 1) to monitor the correlation between collective action and social learning; and 2) to discern whether social learning can be credited to the success of collective action in community forestry (CF) governance. Social learning can be defined as the act of voluntarily sharing knowledge relative to one's lived experience, to move towards collective learning and action regarding resource management. The author utilized a case study and compiled qualitative data from interviews, observations, and document reviews from joint forest management board members. Board members were from the Wet'suwet'en Community Forest Corporation (WCFC), two local towns in British Columbia, Smithers and Telkwa, while also using input from a local forest business and recreational forest users. Results show that: 1) benefits from sharing knowledge led to a desire for increased governance proficiency and better support of community initiatives; 2) there was an increased understanding of resource management practices, climate change, as well as the requirements of managing a forestry business; 3) strengthened relationships from all stakeholders can be mutually beneficial; and 4) that collective decision-making and action toward a shared goal can be attained through social learning. A gap identified by the researcher is: 1) that further research into the framework of collective action without a focus on social learning could be useful.

Wyatt, S., Hébert, M., Fortier, J. F., Blanchet, É. J., & Lewis, N. (2019). Strategic approaches to Indigenous engagement in natural resource management: use of collaboration and conflict to expand negotiating space by three Indigenous nations in Quebec, Canada. *Canadian Journal of forest research*, 49(4), 375-386.
<https://doi.org/10.1139/cjfr-2018-0253>

As collaborative governance and management practices of natural resources are increasingly utilized to allow for greater Indigenous decision-making and self-determination, conflicts will accompany these processes as they challenge inequities and norms to obtain rights and greater sovereignty. The objectives of this study are: 1) to determine if Indigenous nations increase their level of control in forest and resource management through the use of strategy of utilizing various forms of engagement or utilizing government and industry-determined engagement practices; and 2) to examine how collaborative and conflictual engagement can aid in creating a framework to support the goals of Indigenous peoples regarding resource management. Using a multi-case study with the Atikamekw Nehirowisiwok, Huron-Wendat and Mi'kmaq nations in Quebec, qualitative data was obtained by analyzing available forms and agreements highlighting engagement and an evaluation of the respective history each nation has with the forest sector. The results concluded that: 1) five different processes of engagement were used by the three nations: conflict, consensus, formal, business, and institutional; 2) the most common form of engagement was engagement through conflict; 3) processes of engagement are not always a conscious decision or predetermined but are influenced by factors such as barriers, capacity, and values; 4) collaborative and conflictual engagement were both used by the three nations and led to situations in which their goals were obtained; 5) the importance of governance organizations with professional abilities was highlighted to better collaborate and deliberate with non-Indigenous governments; and 6) Indigenous nations do use various forms of strategic engagement to further their decision-making capabilities over forests and other natural resources. The authors note how crucial establishing flexibility and diversity is to the future of collaborative governance in Canada, to allow for greater space for meaningful Indigenous engagement and to protect Indigenous interests regarding natural resources.

Bissonnette, J. F., Blouin, D., Dupras, J., Chion, C., & Bouthillier, L. (2018). Comparing polycentric configuration for adaptive governance within community forests: Case studies in Eastern North America. *International Journal of the Commons*, 12(1).

To address the gap that institutional arrangements in Community Forestry (CF) have not been fully understood in existing literature, this research tries to: 1) “identify institutional features in governance models of CFs” (p.354); and 2) discuss their polycentric governance configurations. The researchers used variables derived from the socio-ecological system’s (SES) framework to identify the dynamics of polycentric configuration of governance in CFs. By combining an in-depth literature review and open-ended interviews with key informants, the researchers conducted two qualitative case studies of CFs, which are in New Hampshire (NH), US and Ontario, Canada respectively. They identified and described variables of SES in both cases and then analyzed both similarities and differences between the two cases. For both cases, data showed: 1) the state/provincial governments have played a crucial role in shaping rules and practices of CFs; 2) both CFs are owned by municipalities to make sure the control of its management and accountability of local forest managers toward residents; while differences include: 1) the number of rule-making organizations in the CF of New Hampshire is much higher than the CF in Ontario; 2) the CF New Hampshire is more capable to obtain donations and funding than the Ontario case; 3) CF governance in NH appears to have a more complex polycentric than the Ontario case. The researchers conclude that: 1) polycentric features in CFs are conducive to adaptive governance; 2) to some extent polycentric configurations are shaped by legal frameworks which help develop CF initiatives; 3) SES framework is important in the systematic analysis of both cases which can help to identify features of polycentricity and how they differ in the CF cases. Gaps presented in the study include: 1) space for

adaptation to the interactions among various parties in governance is still limited; and 2) the authors also acknowledge in this study that the relatively short temporal period of study, as well as lack of disturbances of both CF cases, limit possibility to explore more in-depth forms of adaptation.

Lawler, J. H., & Bullock, R. C. (2017). A case for Indigenous community forestry. *Journal of Forestry*, 115(2), 117-125.

Indigenous communities in Canada are seeking ways to benefit from forest resources based on traditional values, however, the existing management models for forestry have not provided enough support to indigenous communities in forestry. The aim of this study is: 1) to consider the potential core principles and supporting conditions for Indigenous community forestry; 2) to conduct a literature review and discuss cases in the context of Manitoba, Canada, where forestry issues and local Indigenous are tightly connected; 3) discuss principles, supporting conditions, and outline the current situation of Indigenous community forestry in Manitoba; and 4) identify both opportunities and challenges faced by Indigenous in Manitoba as well as researchers. Opportunities include: 1) Manitoba possesses immense land area available for Indigenous communities to involve in; 2) the existing capacities such as an established relationship between local communities and industries can also support local involvement; 3) community forestry has the potential to simulate the economic activity of indigenous communities; and 4) researchers can do more comparative works between Indigenous community forestry models of Manitoba and the other jurisdictions. Challenges include: 1) specific policy and legislation are developing too slowly to support Indigenous community forestry in Manitoba; 2) there is a need to develop institutional infrastructure in order to support full community participation; 3) the case study reveals the need to identify and assess “commonplace but cumulatively significant” (p.123) initiatives of Indigenous community forestry; 4) assessing the needs of within-Manitoba knowledge and resource sharing between communities is necessary; and 5) market and product development and economic feasibility work are needed to improve the viability of Indigenous community forestry.

Diver, S. (2017). Negotiating Indigenous knowledge at the science-policy interface: Insights from the Xáxli’p Community Forest. *Environmental Science & Policy*, 73, 1-11.

Given how environmental policymaking is shaping and shaped by Indigenous knowledge has not been well examined in existing literature, this study aims to: 1) facilitate the understanding of “how and why some indigenous communities are effectively engaging in environmental policy-making by linking knowledge systems” (p.1). Based on a combination of methods including participant observation, document analysis and semi-structured interviews, the author conducted a case study in Xaxli’p Community Forest (XCF) located in British Columbia, Canada, which aims at obtaining local benefits and control of forestry resources by actively engaging in science-policy negotiations. Based on the case study, the author concludes that: 1) Indigenous knowledge linkages cannot be well understood without considering their political context; 2) Indigenous articulations such as maps and plans cannot be taken as a complete representation of Indigenous knowledge as it is a “place marker for the larger body” of Indigenous knowledge which is contained in the land and people (p.8); and 3) the existing knowledge integration concepts are still not sufficient to address the imbalance of administrative power and indigenous knowledge. Gaps presented in the paper include: 1) the author suggests government provides consist funding stream for the implementation of Indigenous community forestry; 2) besides forestry resources, in the XFC case, community control over non-

forest resources has not been confirmed such as mineral resources; 3) knowledge linkages between different knowledge systems are better viewed through the framework of “Indigenous articulations” such as maps and plans made by Indigenous people in a contemporary socio-political context; and 4) Indigenous communities need more resources to represent themselves in the environmental decision-making process and develop the capacity to formulate their own environmental plans.

Assuah, A., Sinclair, A. J., & Reed, M. G. (2016). Action on Sustainable Forest Management through Community Forestry: The case of the Wetzin'kwa Community Forest Corporation. *The Forestry Chronicle*, 92(2), 232-244.

Sustainability is a crucial goal of community forestry, while little has been discussed about the practices and outcomes of community forestry in relation to Sustainable Forest Management (SFM). This research aims to: 1) examine how forest-based communities are working to manage forests sustainably so that approaches for facilitating SFM can be identified in the context of local community forestry. The researchers conducted a qualitative study on the case of Wetzin'kwa Community Forest Corporation (WCFC) by making use of four methods of data collection, including semi-structured interviews, participant observation, document review and guided forest visits. Criteria and Indicators (C&I) from multi-sources were used to measure the actions of the local community on SFM. These C&I are derived from government agency perspectives of local respondents and frameworks used by Teitelbaum (2014) and Furness et al. (2015). Through the study, the researchers conclude that: 1) it is important to develop local-level indicators to equip local communities with the capacity to track the suitability of their operations; 2) this case study encourages CFs to track and adopt C&I for SFM in a specific Canadian context which is locally meaningful; and 3) the CF approach offers potential opportunities to manage the forest sustainably given that it is local and involves people who are most impacted by former failed forestry practices. Gaps revealed by the study include: 1) currently there is a lack of clear C&I for measuring SFM outcomes of small-scale tenures such as CFs which makes it difficult for researchers to assess the performance of these tenures; 2) the design of Community Forest Agreement (CFA), as well as the limited capacity of local communities, decrease the flexibility required by communities to take innovative approaches to SFM; and 3) future studies could evaluate CF performance by using local indicators developed around the existing C&I and also compare CFs to the other tenures in order to assess the relative contribution of CFs to SFM.

Egunyu, F., & Reed, M. G. (2015). Social learning by whom? Assessing gendered opportunities for participation and social learning in collaborative forest governance. *Ecology and Society*, 20(4).

Processes that enable social learning could probably contribute to sustainable management in community forestry. However, few studies investigate the role that gender plays in encouraging social learning and collective action. The objective of this study is: 1) to identify issues relevant to gender, participation, and social learning in community forestry to give greater attention to power inequalities between different identities during the social learning process. Regarding methods, the authors first conducted a literature review related to gender and social learning. Then an analytical framework was designed to assess gender dimensions of social learning in forest governance including opportunities for learning, spaces of learning, and outcomes of learning. This framework was applied in two case studies from forest-based communities in British Columbia, Canada, and

Uganda respectively. Through the study, the researchers conclude that: 1) gender can affect social learning opportunities and outcomes and both cases show that forest governance initiatives provide fewer opportunities for women to participate and learn; 2) besides the gender gap, other factors such as education and literacy in Uganda and long-standing social norms in Canada also have an influence on the gap of opportunities between men and women; and 3) opportunities for social learning were restricted to certain groups of people in the Uganda case, while it became more restricted over time in the Canadian case. Gaps presented in the paper include: 1) policymakers need to consider gender dynamics and other differences in forest-based communities when designing community forestry initiatives; 2) it is recommended that future studies can investigate the effect of gender mainstreaming strategies on community forestry in both developing and developed countries; and 3) whether or not forums or the other paths which are women-only could be a useful strategy for women in forestry governance and social learning. It is partly answered by Arora-Jonsson's (2010) research in India and Sweden which reveals that such forums could be a safe place for women and address violence.

Egunyu, F., Reed, M. G., & Sinclair, J. A. (2016). Learning Through New Approaches to Forest Governance: Evidence from Harrop-Procter Community Forest, Canada. *Environmental Management*, 57(4), 784-797.

In community forestry, will richer social learning outcomes for the participating community be achieved as time goes on? This study aims to: 1) "investigate the opportunities for and outcomes of social learning" in community forestry over an extended period of time. Beginning with a literature review of social learning and collaborative forest governance to formulate a conceptual framework for analysis, the researchers conducted an in-depth case study of the Harrop-Procter Community Forest (HPCF) in British Columbia, Canada, focusing on how social learning outcomes change over time. They concluded that: 1) besides the factors identified by previous research, government requirements can also influence social learning outcomes, as these requirements both opened and closed opportunities for learning in the HPCF's case; 2) contrary to what the previous studies suggested that learning will enhance opportunities for civic engagement, the study found that in HPCF case learning is being limited with the professionalization of the community forest which is likely to reduce overall participation and associated learning of the community residents over time; and 3) social learning will be mostly limited to people who have direct participation in the official structures of CF governance. They also identified gaps in both research and policies, including: 1) apart from this study, there is a lack of studies on the specific effects of government, NGOs, or donor agencies on social learning in community forestry; (2) the government needs to adopt a more significant process for community consultation which can "make local discontent more visible"; 3) more research is needed to investigate the extent of social learning in environmental governance arrangements over time and focus on tensions between professionalization and learning, and between government requirements and learning opportunities; and (4) there is a need to develop theories which closely examine how the actions in the selected management model evolve over time.

Zurba, M., Diduck, A. P., & Sinclair, A. J. (2016). First Nations and industry collaboration for forest governance in northwestern Ontario, Canada. *Forest Policy and Economics*, 69, 1-10.

This paper aims: 1) to enhance people's collective understanding of collaborative governance in forestry by recording and describing the institutions as well as institutional changes which made

cross-cultural collaboration possible. The researchers conducted a qualitative case study in Miitigoog Forestry in northwestern Ontario, Canada. They held semi-structured interviews with First Nations chiefs, managers from industry and government, and the other involvers in Miitigoog community forestry. They then described the institutional changes in the view of meta-governance. Institutional mapping was also used as an analytical tool to visualize and explain the relationships of different parties involved in participatory governance. Through the case study, the researchers disclose that: 1) tenure modernization influences forest governance mainly by creating opportunities and encouraging collaboration and collaboration is likely to be shaped by interests, norms and values of the partnerships; (2) institutional mapping reveals the framework of governance as well as constraints on its authority, suggesting that the provincial government is in a lack of active participation in collaborative space; and (3) opportunity for new collaboration can be created by the process of substantive decision-making by and with First Nations with policy changes. Gaps presented in the paper include: 1) this case study suggests that continued reforms to support decentralization are promising to protect and enhance space of forest-based communities; 2) challenges faced by the substantive decision-making include limited community-level belief in the agreement and considerable learning curves for new First Nations partners; and 3) topics such as benefits received through engagement, learning implications of being involved need to be further explored.

Furness, E., Harshaw, H., & Nelson, H. (2015). Community forestry in British Columbia: policy progression and public participation. *Forest Policy and Economics*, 58, 85-91.

In 2015, it has been 17 years since the British Columbia Ministry of Forests first formally introduced Community Forest Agreements in 1997, however, a systematic and comprehensive evaluation of this program had not been conducted before this study. The objectives of the study include: 1) explaining the background of community forestry tenure in BC; 2) assessing community involvement, benefits, and challenges in forest management; and 3) assessing the outcomes of community forestry in BC. The methodology used in this study included conducting a telephone survey of the 38 active Community Forest organizations (CFOs) in British Columbia (BC) Community Forest Association. As well as utilizing methods used by Maryudi et al. (2012), they assessed the outcomes in three dimensions including: “1) economic benefits, diversification and innovation; 2) environmental stewardship, and management of the forest for multiple values; and 3) social benefits” (p.86). They conclude that: 1) it is challenging for CFOs to achieve a balance between timber and non-timber values given the current policy and market environment; 2) diversification is not prominent in the majority of CFOs due to issues of scale and economic considerations; 3) CFOs are helpful in mitigating conflicts among forest users in the decision-making process in management; 4) CFOs in BC are successful in involving local communities, providing employment and facilitating familiarities within and among communities; 5) CFOs can strengthen people’s skills as well as awareness needed to address forest management and climate change; and 6) although CFs are unlikely to play a large role in BC’s forest economy, they are important in local scale to benefit resource-dependent communities. Gaps identified in the paper include: 1) CFOs need a more supportive policy or new markets to facilitate the diversification of CFs; 2) similarly, new actions are needed to help expand business opportunities of CFOs; 3) future research can develop Maryudi et al.s’ (2012) methods to compare environmental measures and socio-economic outcomes between tenure types at a local scale; and 4) the study also suggested that in community-managed natural resources elsewhere, similar successes and challenges may be found.

Bullock, R., & Lawler, J. (2015). Community forestry research in Canada: A bibliometric perspective. *Forest Policy and Economics*, 59, 47-55.

Given a significant void that no comprehensive and systematic review of community forestry (CF) research outputs had ever been published, the objectives of this study are: 1) “better understand the status and trends of research and professional views published in journals; 2) identify gaps in the community forestry literature; and 3) provide baseline data to inform future research” (p.48). Sources, where the researchers used to collect community forestry articles, include ISI Web of Science, EBSCO Academic Premier, and Science Direct. Search terms include: “community fores*”, “county fores*”, “town fores*”, “ecofores*”, “community-based resource -management”, “community-based environmental-management”, and “municipal fores*”. Based on the searches and eligibility criteria, 85 papers on CF in Canada were identified. After bibliometric analysis, researchers report that: 1) the research area of CF has been growing steadily, especially with significant growth over the past thirty years; 2) research output and interest appear to be higher when government initiatives are implemented and public debates increase; 3) universities remain the majority in advancing CF researches; 4) CF research is becoming more inclusive given that there is an increase in researches led by female researchers as well as collaboration among colleagues with different professions; 5) The Forestry Chronicle is a main forum of Canadian CF research. Meanwhile, CF research has a wider reach given that interdisciplinary, international social science journals are also prominent forums; and 6) keywords are increasing in both number and variety, indicating a broader and detailed literature. Gaps identified in current CF research include: 1) there is a longstanding need in developing methodologies to actually measure performance and outcomes; 2) there are research opportunities in communities where forests have not been allocated or managed and communities which need economic development and resource management planning ideas; 3) in-depth analysis of research impact such as whom the researcher sees as targeted audiences are necessary; 4) a clear disciplinary and knowledge gap exist given that minimal natural science research has been pursued in CF research; and 5) a global profile of Canada’s CF research is needed in next step of literature review.

Benner, J., Lertzman, K., & Pinkerton, E. W. (2014). Social contracts and community forestry: how can we design forest policies and tenure arrangements to generate local benefits? *Canadian Journal of Forest Research*, 44(8), 903-913.

In 2003, there were broad policy changes that affected forest management in British Columbia which “removed obligations of tenure holders to process timber in areas near where timber was harvested” (p.903). Although there has been much debate about the impacts of these policy changes on community forestry in BC, many of these arguments/debates are based on ideological stance rather than empirical analysis. This study aims: 1) to examine relationships between policy changes and local benefits by detecting the impacts that the policy and tenure arrangements have on indicators of local benefits in BC. The methodology adopted in the study is a combination of quantitative analysis of fiber flow and qualitative field research. In the fiber flow analysis, the researchers designed two kinds of indicators to represent the variation of local benefits. One indicator is Fiber Flow Distance that “fiber moves from where it is cut to where it is scaled” (p.905), which is negatively correlated to local employment. The other one is Fiber Flow Diversity which represents “the number of mills supplied with fiber per license” (p.906), which is positively

correlated to maximizing value of woods. Through this study, the authors conclude that: 1) compared with industrial forest tenures, community forests perform better on the local benefits due to the fiber flow patterns are more localized and diverse; 2) the fiber flow indicators have not been strongly affected by the policy changes at a regional scale, while observations from interviews show suggest that policy changes have resulted in significant rationalization and consolidation in forest production at a more local scale; and 3) the research reveals the difficult trade-off between local employments and economic profits in community forestry in BC. The authors also discussed several gaps: 1) regarding data collection, more accurate records that track wood to its final milling destination are needed as in the coastal area of BC, scale sites are usually not associated with milling locations. Also, the relatively small independent sample of community forests limits the statistical capacity of the study; 2) the inconsistency between quantitative analysis and qualitative interviews suggests that fiber flow analysis focusing on more local scales will be helpful to address the problem where regional trends are likely to mask local variations; 3) also, a long term analysis will enable the comparisons across tenures; 4) besides the indicators focusing on fiber flow patterns, the selection of the other indicators relevant to livelihoods, equity and forest condition is also helpful in measuring local benefits; and 5) more researches on local benefits, tenure arrangements and distributional impacts need to be conducted since there exists a strong possibility that the differences in performance between community forests and the major industrial tenures could be increased if there is a broader range of assessments on local benefits.

Bixler, R. P. (2014). From community forest management to polycentric governance: assessing evidence from the bottom up. *Society & Natural Resources*, 27(2), 155-169.

Decentralization of governance is an emerging trend in community-based natural resource management (CBNRM). There are two objectives of the study: 1) considering community forestry (CF) on the social dimension by highlighting three emergent themes: livelihood and local economics, collaborative forest planning and participatory decision making, and environmental governance; and 2) integrating CF into the literature and theorizing polycentric governance. The researchers adopted a qualitative case-study approach. Fieldwork was conducted in Revelstoke, British Columbia, Canada during the summer of 2007. Semi-structured interviews and secondary data analysis were used to collect and interpret the data of CF in Revelstoke. NVivo was used to identify themes and underlying issues. This study concludes that: 1) CF can play an important role in the governance of cross-scale ecological dynamics, however, further theoretical and practical developments are needed to facilitate both vertical and horizontal linkages in CF governance; and 2) although it is challenging due to the institutional complexity, the theory of polycentricity has potential for experiencing new rules of governance and providing spaces for integrating broader knowledge. This study also presents several gaps: 1) the author acknowledges that one limitation of the study is that besides evidence from bottom up, data from the other level are not assessed, suggesting that future research incorporates data from multiple levels of analysis; 2) embedding CBNRM in polycentric networks theoretically and institutionally is critical for addressing the complex social-ecological problems; 3) more attention needs to be paid to the nature of organizational participation in polycentric governance systems; and 4) research should focus not only on the distinction between decentralization and devolution but also on the vertical levels of decision making as well as the overlapping areas of jurisdictional authority.

Dare, M., Schirmer, J., & Vanclay, F. (2014). Community engagement and social license to operate. *Impact Assessment and Project Appraisal*, 32(3), 188-197.

Achieving “a social license to operate” is crucial for long-term business success, however, although operational community engagement is well recognized as an effective way to achieve social license, it is hard to find studies that critically assess the usefulness and limitations of the social license approach. This paper aims to: 1) address this gap by considering the concept of “social license”; 2) the role of community engagement in achieving social license; and 3) the possible improvements brought by an alternative conceptualization of “social license”. Methods used in this study include case studies from the forest management context, in-depth interviews with forest managers and community members, document analysis and qualitative data analysis using NVivo7. Through the study, the authors: 1) develop an innovative new framework to achieve social license, which conceptualizes social license as “a continuum of multiple licenses achieved across various levels of society” (p.189); 2) they identify three key challenges faced by the operational community engagement to achieve social license, including “issues of trust, representation and changing expectations”(p.194); and 3) additionally, they conclude that considering social license as “continuum” will be helpful to address the changing expectations and interests at different scales. Gaps presented in the paper include: 1) appropriate mechanisms have not been established to involve a broad range of stakeholders to resolve the three challenges mentioned above; 2) achieving social license requires considering not only who and what interests are involved in decision-making processes, but it also requires knowing more about communities that are currently excluded; and 3) how to make community engagement more effective in achieving social licenses at a larger scale of society. Whereas the study suggests that good engagement practice and successful engagement experiences are helpful to achieving social license to operate, more work needs to be done to fully answer these gaps.

Teitelbaum, S. (2014). Criteria and indicators for the assessment of community forestry outcomes: a comparative analysis from Canada. *Journal of environmental management*, 132, 257-267.

Given that there are few empirical studies examining linkages between practices and goals of community forestry (CF), the objective of the study is: 1) to develop the methodology for assessing progress in community forestry in a Canadian context; and 2) to add available baseline data regarding CF practice. The framework of the study contains three basic concepts, namely: 1) local and participatory governance; 2) local economic benefits; and 3) multiple forest use. For each basic concept, the author developed a series of criteria and indicators (C&I) based on a literature review. They also identified four cases for study and comparison in terms of: 1) organizational structure; 2) tenure type; and 3) geo-political context within Canada. Based on the analysis by applying C&I, the study concludes that: 1) there are two instinct approaches to making decisions, including “interests group” and “local government”, and while the latter one is better at democratic representation, it is less strong in the level of diversity and inclusivity, which echoes the findings of Reed and McIlveen (2006); 2) all the four cases prioritize local employment when possible, especially those that are involved in non-timber activities; and 3) two of four cases show strong evidence on multi-use strategy in CF. The author also points out several gaps: 1) will the non-timber activities also serve as a bridge to involve local people given that two CFs in the study with less multi-use approach also have poorer public participation? 2) whether or not it will result in poorer social or environmental outcomes in CFs without enough capacity to fulfill broad sustainability requirements? 3) future research can explore further the linkages between multiple use and the other social benefits; 4) there

is an opportunity in integrating valuation techniques in CF research as well as exploring intangible results such as entrepreneurship and social learning; 5) there is a challenge that existing generic indicators seem not enough to explain differences between case studies; 6) longitudinal analysis of CF performance are needed to refine reliability of findings; and 7) as this study reveals the differences of CF cases on several conceptual dimensions, the next step could be to explore dynamics behind these differences.

Booth, A. L., & Muir, B. R. (2013). "How far do you have to walk to find peace again?": A case study of First Nations' operational values for a community forest in northeast British Columbia, Canada. *Natural Resource Forum*, 37, 153-166.

The growth of Indigenous community forestry (CF) makes it critical to understand how forestry operations can balance the needs and values of a local Indigenous community. This study aims to: 1) build a portrait of Indigenous preferences through a case study; as well as 2) examine key values and expectations of Indigenous CFs. After reviewing the development of CFs and core principles of Treaty No. 8, the researchers conducted a case study in Little Prairie Community Forest (LPCF) in British Columbia (BC), Canada, which is run by two First Nations including Sauteau First Nations and West Moberly First Nations. The study is grounded in an Indigenous-based research approach, using principles noted by Kovach (2009), along with the values of the two local communities. They conclude that: 1) CFs must be conducted in a way that does not jeopardize core cultural values of local communities while considering the economic benefits; 2) CFs in the future can be more compatible with various values of local CFs, rather than adopting a "pick one or the other approach" (p.164); and 3) expanding the capacity to better collaborate with the Indigenous communities is vital in building a knowledge base and creating respectful forestry operations. By discussing the management implications of the study, the researchers also present several gaps faced by current CFs: 1) instead of highlighting general notions such as wildlife conservation, it is much better to understand their significance for Indigenous in a local context and adapt more detailed steps; 2) access to CFs is a growing issue for Indigenous, especially in terms of restricting the access of the non-Indigenous to critical territories of Indigenous which is still difficult for Indigenous in the current social context; 3) viewsapes are also a crucial value for Indigenous CFs, while there are still inappropriate disturbances on the historic visual quality of the local environment; and 4) context grounded in Indigenous patterns rather than a "Eurocentric systems" is another vital dimension in assessing potential impacts of policies on CFs.

Furness, E., & Nelson, H. (2012). Community forest organizations and adaptation to climate change in British Columbia. *Forestry Chronicle*, 88(5), 519 - 524.

Since the community directly interacts with their forest, Community Forest Organizations (CFOs) may be able to successfully limit their impacts on their forest by implementing changes in forest management. Although the involvement of larger organizations and forestry policies are required for changing forestry techniques, there are many adaptations that could be made by community forest managers. This study aims at: 1) providing strategies that managers could implement in terms of practices, education, and research. The impact of climate change on CFOs is evident; the authors state that climate change disturbances are putting, "pressure on local communities by affecting timber quality and production, watersheds, and water availability, and increasing risk to health from

smoke and fire”. To evaluate the current awareness and adaptations in place, the authors surveyed thirty-eight organizations which were active members of the British Columbia Community Forestry Association (BCCFA). Conclusions include: 1) with a 100% response rate, the authors found that 45% of the organizations were already aware of climate change effects and were researching adaptations, while 32% had already implemented new strategies; 2) given CF’s capacity to undertake climate change adaptation indicated by the high levels of climate change understanding amongst these organizations, CF should be given “support from government and other institutions, as well as targeted training, funding, and equipment to match the size and breadth of the task”. Gaps and challenges identified in the study include: 1) despite the close relationship with the forests and desire to reduce climate change impacts, adapting to climate change poses a challenge to community forests (CF) because they already have numerous goals and responsibilities, as well as high expectations from many levels of organization; and 2) the authors also note the need for future studies to collect more inclusive data given that results from this survey with BCCFA may differ if other organizations had been included.

Teitelbaum, S., & Bullock, R. (2012). Are community forestry principles at work in Ontario's county, municipal, and conservation authority forests? *Forestry Chronicle*, 88(06): 697-707.

As of 2012, there is little research available on Ontario’s County, Municipal and Conservation Authority forests, however, they have a good fit with the concept of community forestry (CF) given their local governance structure and aims at local benefits, suggesting there is a conspicuous knowledge gap. Thus, the objective of this study is: 1) to investigate the extent to which the three principles of CF, namely participatory governance, local benefits and multiple forest use are at work in County/Municipal and Conservation Authority forests. The study approach follows three basic steps: 1) select qualified sites; 2) design suitable measures aligned with the principles of CF; and 3) tabulate comprehensive index scores to rank performance. The survey followed a comprehensive sampling strategy (Dilman et al. 2009) and the analysis was based on 11 measures relevant to the three principles of CF. Conclusions include: 1) regarding governance, the forests have a distinctly local decision-making process which is based on elected officials exclusively; 2) most organizations of the forests undertake multiple forms of public participation, showing that these forests include a “participatory” dimension; 3) in the area of local benefits, the performance of these forests are weaker compared to a similar Canadian study given their relatively lower forestry-employment and local processing; 4) however, they have strength in the non-timber benefits for local people comparing to employment creation in extractive forestry activities; and 5) about multiple forest use, recreation is the most common which is followed by education, and Conservation Authorities perform slightly better in this area than Counties/Municipalities. Several gaps are presented in the discussion section: 1) it is useful to survey public perceptions and attitudes regarding the effectiveness of current organizational approaches to public participation; 2) whether Aboriginal consultation processes and engagement levels are sufficient and effective in these forests; 3) future analyses can use both spatial analysis and local officials to clarify the state of Aboriginal engagement in County/Municipal and Conservation Authority forests; 4) measuring the full contributor of local economic benefits is needed; 5) future researches can compare the revenues derived from timber harvests and non-timber forests. Also, it will be helpful to analyze the types and profitability of the products from CFs given the rising interest in non-timber products; 6) besides economic benefits, broadening the analyzing scope of local benefits by including non-timber benefits as well as ecological services is warranted; and 7) exploring the local preferences which

influence the types of activities and strategies adopted by CFs to generate avenues is needed in order to facilitate the multiple use approach.

Ambus, L., & Hoberg, G. (2011). The evolution of devolution: A critical analysis of the community forest agreement in British Columbia. *Society and Natural Resources*, 24(9), 933-950.

Up to 2011, while existing literature has identified some evidence suggesting that in community forestry (CF), decentralization of authorities is insufficient in both design and implementation of policies, it still lacks a framework that can be used to measure the degree of authority devolved to communities. This study attempts to fill this gap by analyzing: 1) the nature and extent of devolution of community forest initiatives in British Columbia (BC), Canada. An analytical framework was developed to gauge the extent of devolution. Data sources include a review of documents and semi-structured interviews where 27 interviews were conducted. Based on the framework and data, the researchers then identified the actual distribution of authority over the decision-making process in the management of CFs. Conclusions of the study include: 1) the degree of devolution the authority of provincial government is far from enough given that the changes relevant to the tenure agreement of CF are “not as substantive, comprehensive, or innovative as originally envisioned” (p.945); and 2) the authority which has been devolved to communities are mainly restricted to operational decisions of affecting on-the-ground aspects affecting on-the-ground aspects of timber harvesting. Gaps presented in the paper include: 1) currently the near-exclusive focus of the Ministry of Forest Resources (MFR) on timber harvesting and its authority to determine harvestable timber volume have limited communities’ capacity to develop other interests including non-timber products; 2) CFs’ authority on non-timber forest products (NTFP) is high as the government has not developed an integral regulatory system for NTFPs, however, most communities have not utilized their rights to make the most of NTFPs, indicating that NTFPs are considered open-access resources more than the rights attached to tenures; and 3) MFR need to devolve more authority to communities to create space for meaningful participation in CFs.

Booth, A. L., & Skelton, N. W. (2011). "There's a conflict right there": Integrating indigenous community values into commercial forestry in the Tl'azt'en First Nation. *Society and Natural Resources*, 24(4), 368-383.

When participating in commercial industries, Indigenous communities seem to confront more conflicts between traditional cultural values and profit-gathering goals. This study tries to: 1) identify some of these challenges by presenting a case study of one British Columbia First Nation (BCFN) in order to confirm the other research, as well as discover challenges rarely discussed. The territory of Tl'azt'en First Nation (TFN) is in north-central BC and the research data was collected from 1996 to 1998 by conducting 43 interviews and reading secondary documentation provided by TFN. Several challenges identified by the study include: 1) Indigenous communities confront restricted access to a suitable land base. Some industry professionals familiar with TFN in the interviews even stated that “many in the government expected that the Tl'azt'en Nation would fail in their efforts to operate the tenure” to prove that TFN was not capable in forestry management (p.374); 2) operating costs of industrial tenures are prohibitive to TFN and a lack of community expertise is also challenging; 3) the potential conflicts between commercial demands and traditional values are also notable; and 4) the authors also presented a challenge rarely addressed before,

namely the need to keep community members cohesive by integrating community and community values into a forest industry. Finally, the authors conclude that: 1) TFN is not completely successful as a commercial forestry operator due to the tension between internal traditional values and outside influences; and 2) the challenges discussed above “have the potential to be solved through the acceptance and implementation of an aboriginal forestry ideal and an aboriginal tenure system” (p.380). Besides the aforementioned challenges, other gaps presented in the paper include: 1) it is not well dealt with by the current research that Indigenous’ lack of expertise and knowledge regarding operations of forestry and mills will affect the long-term engagement of local communities; and 2) how to achieve a trade-off between running mills as business and fulfilling community expectations is another great challenge faced by indigenous communities.

Alemagi, D. (2010). A comparative assessment of community forest models in Cameroon and British Columbia, Canada. *Land Use Policy*, 27(3), 928-936.

This paper conducts a comprehensive evaluation of community forestry (CF) models in Cameroon and British Columbia (BC), Canada by assessing how specific jurisdictions have evolved from the post-colonial forest concession model to CF model. Through comparing similarities and differences, they aim at: 1) identifying the weakness and strengths which can inform CF model. In this study, a qualitative research approach was adopted and the researchers collected data from both secondary and primary sources. A criteria framework was designed to assess CF models in both areas, which contains four fundamental themes, namely 1) legislation governing community forests; 2) procedures for forming community forests; 3) administration and oversight of community forests; and 4) other measures for maintaining and improving community forest operations. Through comparisons of CFs in Cameroon and BC, the authors conclude that: 1) the BC model is more developed than Cameroon according to its legislative provisions, waste assessment, public consultation and requirements of the management plans; 2) CFs in BC are characterized as large area, abundant expertise and training in the management of CF; 3) CFs in Cameroon has more integral predictable reporting system; and 4) CFs in both areas have established the legal and administrative framework for CF management as well as monitoring system to ensure legislative compliance. Furthermore, they identified challenges and recommendations for CF models: 1) legislative framework governing CF in Cameroon can be broadened; 2) the maximum statutory size for CF in Cameroon need to be increased; 3) more efficient equipment and machinery should be introduced into CF in Cameroon; 4) training regarding CF at the university level should be provided in Cameroon; 5) about forestry market in Cameroon, an universal fixed price for forestry products should be established to guarantee price security for products of CF; 6) devolving authority of decision-making on CF license in Cameroon and BC; 7) in BC, exact period for system reporting should be specified; 8) complete public participation, CF certification and reinforcing system can be promoted in both regions; 9) increasing protection of traditional user rights for non-timber forestry product in both regions; and 10) stakeholders should be regularly consulted and the legislative framework should be reviewed to ensure its relevance and efficiency.

Reed, M. G. (2010). Guess who's (not) coming for dinner: Expanding the terms of public involvement in sustainable forest management. *Scandinavian Journal of Forest Research*, 25, 45-54.

One of the important goals of community forestry (CF) is to achieve sustainable forest management through “fair and effective decision-making” (p.45, Canadian Council for Forest Ministers, 2003). However, it is still questionable whether community involvement is truly fair and effective. This study aims to: 1) examine the intersection of gender, class, and racialized identities in CFs in order to determine whether differential opportunities will be provided to different identities in CF management when these three factors work together. After briefly reviewing the history of the role of gender, class and racialized identities in forestry culture, the author adopted results from several studies to examine the context where community involvement in forest decision-making has taken place. There are two major sources of data: 1) a team-based project led by Parkins which surveyed 102 forest committees across Canada to determine the overall effectiveness of public participation in forestry (Parkins et al., 2006); and 2) results from other published studies which are related to the themes across Canada are also considered. After presenting the research results regarding access, values, knowledge and perspective in forestry management, the author concludes that: 1) elites whose stake is largely economic and relevant to industrial forestry are still dominant in community engagement, while identifies that are defined by dominant norms such as women, Indigenous and those of lower socioeconomic status are still unlikely to make substantive contributions when participating; 2) women remain significantly underrepresented on these forestry management committees; and 3) Indigenous people, both male and female, are “the most marginal” in the hierarchy of forestry employment (p.52). Several gaps and recommendations are presented: 1) new strategies that move beyond “the comfort of Western methods of learning” need to be adopted to build trust, engage in listening in order to expand the terms of public engagement; 2) it is warranted to develop skill sets among participants which can demonstrate more inclusive practice and reduce the elitist tendencies; those who are part of organized domains are more likely than those who only have social interests to gain access to forestry advisory committees; 3) the analysis also suggests that overrepresentation of men is likely to facilitate the prioritization of utilitarian values in management of CFs; 4) current primary goal of CF set by government, namely “providing avenue and employment”, makes the CF exercises more akin to an exercise in achieving “local industrial forestry” than to an attempt to realize broader principals of CF; and 5) whether the way minority representatives engage in CF management is acceptable is still heavily influenced by social norms, cultural stereotypes and existing expectations for both men and women.

Robinson, E. (2010). The cross-cultural collaboration of the community forest. *Anthropologica*, 52(2), 345-356.

Up to 2010, a lot of papers regarding community forestry (CF) have been written on the benefits of CF tenures, however, not many talk about how to accomplish it, indicating a gap between the theory and practice in CF. This study aims at: 1) filling this gap by “exploring how First Nations and non-First Nations are collaborating to collectively manage local land as equal partners under the Community Forest Management (CFA) in British Columbia (BC)” (P.345). The author investigated the Likely/Xat’sull Community Forest in BC as a case study, where the settlement of Likely is non-First Nation and the Xat’sull is First Nation, while the CF is collectively managed by the two nations. After reviewing the relevant postcolonial, interpretive and landscape theories regarding First Nations and CF, the author designed a framework to present results. The framework contains seven dimensions, namely: 1) a sense of connection to community forest land; 2) building and maintaining trust through open communication; 3) dealing with different cultural perspectives; 4) cross-cultural

knowledge building; 5) running the community forest as a business; 6) capacity building; and 7) benefits from community forestry. The author concludes that: 1) although CFs only possess small proportion of total provincial tenure, it is crucial to recognize the changes created in the lived experiences of people in local scales; 2) the shift from industrial forestry to community forestry is influencing local autonomy over the land base given that local people can attain experience in natural resource management and policy development in local levels can provide solutions to local challenges; 3) the Likely/Xat'sull board is creating an actively postcolonial way of interacting where traditional ecological knowledge can be synthesized into dominant economic paradigm; and 4) this study also shows that a small group of citizens can operate a local land management project successfully through cross-cultural cooperation. This paper also reveals some gaps in CF research: 1) compared to non-First Nation, capacity building is more warranted for First Nation to respond to employment opportunities and access to management in CF; and 2) the Xat'sull community possesses fewer logging equipment as well as forestry related skills comparing to the Likely community, resulting in a perception among Indigenous people that major economic benefits only occur to those members with forestry experience.

Bullock, R., Hanna, K., & Slocombe, D. S. (2009). Learning from community forestry experience: Challenges and lessons from British Columbia. *Forestry Chronicle*, 85(2), 293-304.

By presenting an empirical multi-case study research which discusses the origins and detailed interpretations of the community forest (CF) concept, this study tries to: 1) identify key challenges and recommendations for the CF practice. Based on a multiple case study approach to explain the evolving nature of the implementation process, the authors compared four CF initiatives in southern British Columbia (BC), namely Creston, Cortes Island, Malcolm Island, and Denman Island. Data were collected from site visits and in-depth semi-structured interviews (30) in each case community during June 2005 and supplementary information from document review. The data analysis follows a bottom-up view of implementation as illustrated by Hjern et al. (1978). After presenting the nuanced development process of each CF case, the authors discuss several common challenges: 1) low local support and awareness, which slow response times in the negotiation process; 2) difficulty reaching consensus which makes the current process of generating consensus time-sensitive; 3) lack of human and physical resources; 4) poor forest health and timber profiles; 5) weak senior government support where “a double standard for industry and communities” exists; 6) resistance from conventional forest management paradigm which echoed by the phenomenon that many CFs began with ecological orientation but ended with economic focus; 7) competitions among First Nations, communities, and existing license holders in a particular makes it difficult to apply for a CF tenure or expand operating area; 8) unsupportive stumpage appraisal system; and 9) diverse motivations for pursuing community forestry. The authors also propose several recommendations to refine CF: 1) goals and objectives should be defined at the start to help participants in CF determine their true motivations; 2) formalizing the community forest group early on is important; 3) First Nations and non-aboriginal groups are expected to foster good working relations even if they do not plan to work together; 4) Keeping in touch with politicians and bureaucrats from all levels of government; 5) engaging the public creatively to avoid unproductive yelling matches at the local scale; 6) developing partnership opportunities with public and private institutions; 7) communities could develop their own information on their forests and community, and develop quality maps when it is possible; and 8) seeking professional consultation is useful in improving legitimacy and liability of local CF initiatives. Other gaps identified by the paper include: 1) besides measuring local public

support and awareness, future research can gauge regional awareness for CF and ecosystem-based management which can provide insights into mobilizing potential supporters; 2) lack of access to funding, training regarding forestry and marketing, as well as a strong volunteer network are challenges for CFs; 3) the potential on non-timber forest products (NTFP) is an area “that is often talked but rarely realized” (p.300); and 4) reconciliation the diverse perceptions to CF of communities and governments are important in facilitate CF development.

McIlveen, K., & Bradshaw, B. (2009). Community forestry in British Columbia, Canada: The role of local community support and participation. *Local Environment*, 14(2), 193-205.

While community involvement is significant in facilitating democratization in community forestry (CF), it not certainly contributes to community economic development (CED). This paper aims to: 1) “conceptualize and empirically assess key contributions to CED” based on CF case studies in British Columbia (BC), Canada. The authors firstly qualified the term “success” in the context of successful community forestry by literature review through which they identified five factors that are prominent in the success of CF, namely social cohesion, community support, broad community participation, appropriate expertise, and experience. Based on these factors, 10 CFs in BC were surveyed in 2001 and there was an intensive analysis of the Burns Lake CF by completing 10 face-to-face interviews. Reflecting on the insights from the developments of Burns Lake CF as well as the other nine CFs, the authors conclude that: 1) community support and to a lesser degree community participation, are crucial for the implementation of community forestry. Furthermore, community support, as well as participation, can compensate for limitations in forestry expertise and experience which is exemplified by the case of Harrop-Protor CF; 2) social cohesion is an important element, even a prerequisite for CF to achieve community support and participation; and 3) expertise and experience can supplant the need for community involvement and are significant for CF in realizing goals of economic benefits. Gaps and recommendations include: 1) while the Burns Lake CF is successful from the view of generating economic benefits and employment, it does not belong to the kind of inclusive initiatives described by the idealized model of CED that seeks broad participation. Here, its primary aim is to establish a board that can secure individuals with forestry experience and expertise, which is not regarded as problematic by community members to whom employments and economic benefits are more important than simply inclusive participation in CF management, whereas community supports are still critical in its success; and 2) the comparison between Burns Lake CF and Harrop-Proctor CF, which are all successful but based on different dynamics, suggests that a CF must either have expertise and experience or community support and cohesion to achieve success.

Bullock, R., & Hanna, K. (2008). Community forestry: Mitigating or creating conflict in British Columbia? *Society and Natural Resources*, 21(1), 77-85.

Community forestry (CF) is expected as an effective response to pervasive conflict over forest management. This study aims at: 1) exploring three broad bases of conflict in CF, namely communicative, personal dynamics, and process issues. Based on a framework formed by the aforementioned three factors, the authors discuss issues and perspectives regarding conflicts seen in the CF literature with a focus on British Columbia (BC), Canada. After reviewing types of community-based tenures in BC as well as the nature of conflict, the authors present conflicts based on the three dimensions as dynamic elements in CF management. Conclusions of the study include:

1) there are common challenges confronting the planning and implementation process of CF including but not limited to “different forms of knowledge, local imbalances of power, polarization of local interests, variable local management capacity, contrasting values, and personality conflicts” (p.84); 2) while CF can help mitigate conflict among groups, “would-be success” could be diminished by too many expectations; 3) not all communities in need have approaches to community-based forestry tenure and CF is not a panacea for all problems left by industrial forestry; and 4) understanding the dynamics of conflicts is essential in developing optimal stratagems for the CF development. Some gaps are identified: 1) how to define stakeholders in CFs appropriately is a major challenge as exclusion and favoritism can result in conflicts; 2) achieving representations across generations as well as “people separated from the issue by both space and time” is another challenge (p.83); and 3) viable strategies to ease the transition from a traditional industrial model to CF model is are needed to ease the significant job loss in some communities in the transition stages.

Pinkerton, E., Heasliip, R., Silver, J. J., & Furman, K. (2008). Finding "space" for comanagement of forests within the neoliberal paradigm: Rights, strategies, and tools for asserting a local agenda. *Human Ecology*, 36(3), 343-355.

Emerged as a response to the governance dilemma of industrial forestry, the community forestry (CF) program in British Columbia (BC) is a useful test of the hypothesis that “in some cases, roll-out neoliberalism may afford the political space for the assertion of rights and the use of strategies and tools which permit the authentic emergence of comanagement” (p.344). This study aims at: 1) examining this open question by looking closely at the rights, strategies, and tools asserted and used by BC CFs. The authors firstly focused on the weaker rights allocated to CFs. Then they discussed the strategies used by the Harrop-Pocter Community Forest (HPCF), which was considered one of the five “successful” CFs that were awarded 25-year tenures. The data were collected from a literature review on neoliberalism and various forms of management including CF, and a year of research on BC CFs including literature reviews and interviews. Conclusions of the study include: 1) results of the study confirm the aforementioned hypothesis; 2) meanwhile, they also confirm that the nature of the political space afforded by the roll-out of neoliberalism policies is complex and case-specific. For instance, a few CFs in this study learned to make use of the government-designed model of the log sort auction to make the price of their timber products competitive; 3) while roll-elements of neoliberalism can create space for comanagement, some cases of the study show that even roll-back neoliberal policies inclined to further market rule also help the continuation and expansion of community forests, such as reallocation of timber to small mills as well as reduction of the stumpage fees; 4) the ideologies of dominant groups create conditions, categories and categories under which these ideologies can also be successfully challenged; and 5) some CFs can get good development “if they have either large enough scale and access to a log sort auction or sufficient alternative strategies such as value-added milling, NTPFs, access to eco-labelled markets, o volunteerism” (p.353). Gaps presented in the study include: 1) economic viability can be realized through not only log sort auction but also NTFPs and volunteerism; 2) how to generate enough revenue from NTFPs and logging to support ongoing operation is another challenge; and 3) the authors also recommended seven strategies that can help establish economic viability in local CFs (p.351).

Prudham, S. (2008). Tall among the trees: Organizing against globalist forestry in rural British Columbia. *Journal of Rural Studies*, 24, 182-196.

After the Cowichan sawmill in Youbou was closed by the TimberWest Corporation in 2001, the employees of the mill formed an NGO, the Youbou TimberLess Society (YTS) to strive for their entitlements as well as social and environmental justice, which became one of the more compelling voices for forest policy reform in British Columbia (BC). This study has three main objectives: 1) recording and profiling the development and evolution of YTS organizing; 2) understanding the character and implications of organizing around globalist forestry in BC based on the YTS case; 3) the third objective focuses on the highly difficult and contingent process of constructing counter-hegemonic globalization which transcends the particularities of this group and place. The author addressed these questions based on three steps: 1) providing additional context for the YTS by discussing the closure of the Cowichan sawmill; 2) reviewing the evolution of YTS organizing, especially the ways in which the group evolved from a place-bound organization to one that focuses on broader issues; and 3) furthering considering the challenges and insights about the politics and pitfalls of organizing around counter-hegemonic globalization. Conclusions of the paper include: globalization should be considered as produced and shaped through discourse and actions by contending moves for self-constituted autonomies such as YTS; and 2) drawing on Polanyi's double movement theory, namely "pushing for freer capitalist markets on the one hand, and yet stronger forms of social regulation on the other" (1944, p.190), the author thinks that the experiences of YTS qualify Polanyi's theory given that "they demonstrate an inherent geography to the double movement" (p.191). This study also reveals some gaps: 1) attentions need to be paid to the ways in which groups acquire relative unity and cohesion in resisting capital unhampered logic in order to explain how these groups move beyond disorganized and mutually contradictory struggles; 2) there are still challenges to mobilize a truly counter-hegemonic form of globalization from these disparate and sparse particularistic movements including YTS; and 3) identities and views of individuals involved in the counter-hegemonic movements could also be changed by hegemony, which posts another challenge to the anti-hegemonic movements.

Young, N. (2008). Radical neoliberalism in British Columbia: Remaking rural geographies. *Canadian Journal of Sociology*, 33(1), 1-36.

Dismantling traditional Fordist and Keynesian approaches to economic development, the government of British Columbia (BC) is applying neoliberal principles to reform both corporate resources economies and community-based economies across rural regions of the province. This paper aims at 1) profiling this policy movement and analyzing its impact on traditional economic structures and practices in rural BC (p.2). Data were collected from interviews and ethnographic research conducted in some communities located in BC's rural coastal region. The emphasis of the paper is to restructure the rural economy of BC according to profitability, competitiveness, and resilience. The author first reviewed several concepts related to the research including neoliberalism, and the significance of neoliberalism in rural areas. Then the author contoured and discussed both the Fordist-Keynesian Experiment and the Neoliberal Experiment in BC, as well as their impacts on large industrial economies and community-based economies. Some mapping works were done to show the variation of local economies caused by neoliberal policies. Conclusions of the study include: 1) with the neoliberal policies, the role of government has been changed from promoting stability and the co-development of rural industry and community to separating and facilitating

corporate resource and community-based economies; 2) the spatial liberalization, namely the elimination of nonmarket obligations to corporates and communities, is promoting a major geographic reorganization of harvesting and production, where some regions are enjoying the benefits of concentrating production in their spaces, while other rural spaces, especially coastal regions and smaller communities, are gradually excluded from the production process; 3) new programs created by state that reallocate funding competitively in order to generate alternative economies for local communities could exacerbate inequities among communities with different competing capacities; and 4) the neoliberal projects also post challenges to rural resource-based economies given that communities which once served as the backbone of industrial resource economy nonetheless are now identified as barriers to these industrial entrepreneurships. The latter two conclusions are also challenges that confront local resource-based communities that are posted by neoliberal policies.

Bibliography of Community Forestry in Canada 1935-2022

Citations are in order of newest to oldest

- Kant, S., & Vertinsky, I. (2022). The anatomy of social capital of a Canadian indigenous community: Implications of social trust field experiments for community-based forest management. *Forest Policy and Economics, 144*, 102822.
- Persaud, A. W., Nelson, H. W., & Satterfield, T. (2022). Reconciling institutional logics within First Nations forestry-based social enterprises. *Organization & Environment, 35*(3), 394-413.
- Devisscher, T., Spies, J., & Griess, V. C. (2021). Time for change: Learning from community forests to enhance the resilience of multi-value forestry in British Columbia, Canada. *Land use Policy, 103*, 105317.
- Siegner, M., Panwar, R., & Kozak, R. (2021). Community forest enterprises and social enterprises: the confluence of two streams of literatures for sustainable natural resource management. *Social Enterprise Journal, 17*(4), 584-603.
- Egunyu, F., Reed, M. G., Sinclair, A. J., Parkins, J. R., & Robson, J. P. (2020). Public engagement in forest governance in Canada: whose values are being represented anyway?. *Canadian Journal of Forest Research, 50*(11), 1152-1159.
- Hotte, N., Wyatt, S., & Kozak, R. (2019). Influences on trust during collaborative forest governance: a case study from Haida Gwaii. *Canadian Journal of Forest Research, 49*(4), 361-374.
- Lawler, J. H., & Bullock, R. C. L. (2019). Indigenous control and benefits through small-scale forestry: a multi-case analysis of outcomes. *Canadian Journal of Forest Research, 49*(4), 404-413.
- Nelson, H., Nikolakis, W., & Martin-Chan, K. (2019). The effect of institutional arrangements on economic performance among first nations: Evidence from forestry in BC. *Forest Policy and Economics, 107*, 101922.
- Palaschuk, N., & Bullock, R. (2019). Achievements in Aboriginal forestry research: Claims, evidence and opportunities. *Small-scale Forestry, 18*(2), 213-234.
- Pinkerton, E. (2019). Benefits of collaboration between Indigenous and non-Indigenous communities through community forests in British Columbia. *Canadian Journal of Forest Research, 49*(4), 387-394.
- Sinclair, A. J. (2019). Unraveling the Relationship between Collective Action and Social Learning: Evidence from Community Forest Management in Canada. *Forests, 10*(6), 494.

- Wyatt, S., Hébert, M., Fortier, J. F., Blanchet, É. J., & Lewis, N. (2019). Strategic approaches to Indigenous engagement in natural resource management: use of collaboration and conflict to expand negotiating space by three Indigenous nations in Quebec, Canada. *Canadian journal of forest research*, 49(4), 375-386.
- Bissonnette, J. F., Blouin, D., Dupras, J., Chion, C., & Bouthillier, L. (2018). Comparing polycentric configuration for adaptive governance within community forests: Case studies in Eastern North America. *International Journal of the Commons*, 12(1).
- Lawler, J. H., & Bullock, R. C. (2017). A case for Indigenous community forestry. *Journal of Forestry*, 115(2), 117-125.
- Diver, S. (2017). Negotiating Indigenous knowledge at the science-policy interface: Insights from the Xáxli'p Community Forest. *Environmental Science & Policy*, 73, 1-11.
- Assuah, A., Sinclair, A. J., & Reed, M. G. (2016). Action on Sustainable Forest Management through Community Forestry: The case of the Wetzin'kwa Community Forest Corporation. *The Forestry Chronicle*, 92(2), 232-244.
- Egunyu, F., Reed, M. G., & Sinclair, J. A. (2016). Learning Through New Approaches to Forest Governance: Evidence from Harrop-Procter Community Forest, Canada. *Environmental Management*, 57(4), 784-797.
- Zurba, M., Diduck, A. P., & Sinclair, A. J. (2016). First Nations and industry collaboration for forest governance in northwestern Ontario, Canada. *Forest Policy and Economics*, 69, 1-10.
- Egunyu, F., & Reed, M. G. (2015). Social learning by whom? Assessing gendered opportunities for participation and social learning in collaborative forest governance. *Ecology and Society*, 20(4).
- Bullock, R., & Lawler, J. (2015). Community forestry research in Canada: A bibliometric perspective. *Forest Policy and Economics*, 59, 47-55.
- Furness, E., Harshaw, H., & Nelson, H. (2015). Community forestry in British Columbia: Policy progression and public participation. *Forest Policy and Economics*. <http://dx.doi.org/10.1016/j.forpol.2014.12.005>.
- Benner, J., Lertzman, K., & Pinkerton, E. W. (2014). Social contracts and community forestry: how can we design forest policies and tenure arrangements to generate local benefits? *Canadian Journal of Forest Research*, 44(8), 903-913.
- Bixier, R. P. (2014). From community forest management to polycentric governance: Assessing evidence from the bottom up. *Society and Natural Resources*, 27(2), 155- 169.
- Dare, M., Schirmer, J., & Vanclay, F. (2014). Community engagement and social license to operate. *Impact Assessment and Project Appraisal*, 32(3), 188-197.

- Teitelbaum, S. (2014). Criteria and indicators for the assessment of community forestry outcomes: A comparative analysis from Canada. *Journal of Environmental Management*, 132, 257-267.
- Booth, A. L., & Muir, B. R. (2013). "How far do you have to walk to find peace again?": A case study of First Nations' operational values for a community forest in northeast British Columbia, Canada. *Natural Resource Forum*, 37, 153-166.
- Palmer, L., Smith, P., & Bullock, R. (2013). Community forests Canada: A new national network. *Forestry Chronicle*, 89(2): 133-134.
- Pinkerton, E. W., & Benner, J. (2013). Small sawmills persevere while the majors close: Evaluating resilience and desirable timber allocation in British Columbia, Canada. *Ecology and Society* 18(2):34. <http://dx.doi.org/10.5751/ES-05515-180234>
- de Gomez, W. & Bullock, R. (2012). Civil society in Canada: A case study of rural and urban planning contexts. *The Social Science Journal*, 49, 202-209.
- Furness, E., & Nelson, H. (2012). Community forest organizations and adaptation to climate change in British Columbia. *Forestry Chronicle*, 88(5), 519 - 524.
- Kube, M. (2012). Community-based forest management. *Forestry Chronicle*, 88(2), 101-103. Luckert, M. K. (1999). Are community forests the key to sustainable forest management? Some economic considerations. *Forestry Chronicle*, 75(5), 789-792.
- Teitelbaum, S., & Bullock, R. (2012). Are community forestry principles at work in Ontario's county, municipal, and conservation authority forests? *Forestry Chronicle*, 88(06): 697-707.
- Ambus, L., & Hoberg, G. (2011). The evolution of devolution: A critical analysis of the community forest agreement in British Columbia. *Society and Natural Resources*, 24(9), 933-950.
- Booth, A. L., & Skelton, N. W. (2011). "There's a conflict right there": Integrating indigenous community values into commercial forestry in the Tl'azt'en First Nation. *Society and Natural Resources*, 24(4), 368-383.
- Alemagi, D. (2010). A comparative assessment of community forest models in Cameroon and British Columbia, Canada. *Land Use Policy*, 27(3), 928-936.
- Reed, M. G. (2010). Guess who's (not) coming for dinner: Expanding the terms of public involvement in sustainable forest management. *Scandinavian Journal of Forest Research*, 25, 45-54.
- Robinson, E. (2010). The cross-cultural collaboration of the community forest. *Anthropologica*, 52(2), 345-356.
- Bullock, R., Hanna, K., & Slocombe, D. S. (2009). Learning from community forestry experience: Challenges and lessons from British Columbia. *Forestry Chronicle*, 85(2), 293-304.

- McIlveen, K., & Bradshaw, B. (2009). Community forestry in British Columbia, Canada: The role of local community support and participation. *Local Environment*, 14(2), 193-205.
- Bullock, R., & Hanna, K. (2008). Community forestry: Mitigating or creating conflict in British Columbia? *Society and Natural Resources*, 21(1), 77-85.
- Davis, E. J. (2008). New promises, new possibilities? Comparing community forestry in Canada and Mexico. *British Columbia Journal of Ecosystems and Management*, 9(2), 11-25.
- Dunkin, J. (2008). A forest for the trees: Deforestation and conservation efforts in Northumberland county, Ontario 1870-1925. *International Journal of Regional & Local Studies*, 4(1), 47-70.
- Pinkerton, E., Heaslip, R., Silver, J. J., & Furman, K. (2008). Finding "space" for comanagement of forests within the neoliberal paradigm: Rights, strategies, and tools for asserting a local agenda. *Human Ecology*, 36(3), 343-355.
- Prudham, S. (2008). Tall among the trees: Organizing against globalist forestry in rural British Columbia. *Journal of Rural Studies*, 24, 182-196.
- Young, N. (2008). Radical neoliberalism in British Columbia: Remaking rural geographies. *Canadian Journal of Sociology*, 33(1), 1-36.
- Ambus, L., Davis-Case, D., Mitchell, D., & Tyler, S. (2007). Strength in diversity: Market opportunities and benefits from small forest tenures. *British Columbia Journal of Ecosystems and Management*, 8(2), 88-99.
- Ambus, L., Davis-Case, D., & Tyler, S. (2007). Big expectations for small forest tenures in British Columbia. *British Columbia Journal of Ecosystems and Management*, 8(2), 46-57.
- Bradshaw, B. (2007). On definitions of "success" and contingencies affecting success in community forestry: A response to Reed and McIlveen (2006) and Pagdee et al. (2006). *Society and Natural Resources*, 20(8), 755-758.
- Bullock, R. (2007). Two sides of the forest. *Journal of Soil and Water Conservation*, 62(1), 12A - 15A.
- Cathro, J., Mulkey, S., & Bradley, T. (2007). A bird's eye view of small tenure holdings in British Columbia. *British Columbia Journal of Ecosystems and Management*, 8(2), 58-66.
- Charnley, S., & Poe, M. R. (2007). Community forestry in theory and practice: Where are we now? *Annual Review of Anthropology*, 36, 301-336.
- Prudham, S. (2007). Sustaining sustained yield: Class, politics, and post-war forest regulation on British Columbia. *Environment and Planning D: Society and Space*, 25, 258-283.

- Reed, M. G., & McIlveen, K. (2007). Other voices from the neighborhood: Reconsidering success in community forestry - a response to Bradshaw's commentary paper. *Society and Natural Resources*, 20(8), 755-758.
- Tyler, S., Ambus, L., & Davis-Case, D. (2007). Governance and management of small forest tenures in British Columbia. *British Columbia Journal of Ecosystems and Management*, 8(2), 68-79.
- Vernon, C. (2007). A political ecology of British Columbia's community forests. . *Capitalism, Nature, Socialism*, 18(4), 54-74.
- Grainger, S., Sherry, E., & Fondahl, G. (2006). The John Prince research forest: Evolution of a co-management partnership in northern British Columbia. *Forestry Chronicle*, 82(4), 484-495.
- McCarthy, J. (2006). Neoliberalism and the politics of alternatives: Community forestry in British Columbia and the United States. *Annals of the Association of American Geographers*, 96(1), 84-104.
- Reed, M. G., & McIlveen, K. (2006). Toward a pluralistic civic science?: Assessing community forestry. *Society and Natural Resources*, 19(7), 591-607.
- Teitelbaum, S., Beckley, T., & Nadeau, S. (2006). A national portrait of community forestry on public land in Canada. *Forestry Chronicle*, 82(3), 416-428.
- McIlveen, K., & Bradshaw, B. (2005). A preliminary review of British Columbia's community forest pilot project. *Western Geography*, 15(16), 68-84.
- Thompson, A. (2005). Indicator-based knowledge management for participatory decision- making. *Computers and Electronics in Agriculture*, 49(1), 206-218.
- Bradshaw, B. (2003). Questioning the credibility and capacity of community-based resource management. *Canadian Geographer*, 47(2), 137-150.
- Haley, D. (2003). Community forests: An old concept for a new era in British Columbia. *Forum Mag.*, 10(2), 18.
- Duchesne, L. C., & Wetzel, S. (2002). Managing timber and non-timber forest product resources in Canada's forests: Needs for integration and research. *Forestry Chronicle*, 78(6), 837-842.
- Haley, D. (2002). Community forests in British Columbia: The past is prologue. *For. Trees People Newsletter*, 46, 54-61.
- Betts, M., Knox, J., & Forbes, G. (2002). A landscape ecological approach to private woodlot planning in New Brunswick, Canada. *Natural Areas Journal*, 22(4), 311-317.
- Blanchard, P. (2002). Is tenure reform the road to the future? *Forum: Journal of the Association of BC Forest Professionals*, 9(1).

- Duchesne, L. C., & Wetzel, S. (2002). Managing timber and non-timber forest product resources in Canada's forests: Needs for integration and research. *Forestry Chronicle*, 78(6), 837-842.
- Haley, D. (2002). Community forests in British Columbia: The past is prologue. *For. Trees People Newsletter*, 46, 54-61.
- Krogman, N., & Beckley, T. (2002). Corporate "bail-outs" and local "buyouts": Pathways to community forestry? *Society and Natural Resources*, 15(2), 109-127.
- Masse, S. (2002). Forest tenant farming as tested in Quebec: A socio-economic evaluation. *Forestry Chronicle*, 78(5), 658-664.
- Pinnell, H., & Elias, H. (2002). How the Harrop- Procter community is harvesting its forest. *International Journal of Ecoforestry*, 17, 8-16.
- Robinson, D., Robson, M., & Rollins, R. (2001). Towards increased citizen influence in Canadian forest management. *Environments*, 29(2), 21-41.
- Elias, H. (2000). Harrop and Procter: How a persistent community fashioned its own forestry future. *Ecoforestry*, 15, 218-226.
- Barron, J. (1998). Community logs. *Alternatives Journal*, 24(4), 5.
- Beckley, T. M. (1998). Moving toward consensus-based forest management: A comparison of industrial, co-managed, community and small private forests in Canada. *Forestry Chronicle*, 74(5), 736-744.
- Booth, A. L. (1998). Putting "forestry" and "community" into First Nations' resource management. *Forestry Chronicle*, 74(3), 347-352.
- Burda, C., Gale, F., & M'Gonigle, M. (1998). Eco-forestry versus the status quo: Or why innovative forestry is neither contemplated or permitted within the state structure of British Columbia. *BC Studies*, 119 (Autumn), 45-72.
- Burda, C. (1998). Forests in trust: A blueprint for tenure reform and community forestry in British Columbia. *Ecoforestry*, 13(1), 12-15.
- Duinker, P., & Pulkki, R. E. (1998). Community forestry, Italian style: The magnifica comunita di fiemme. *Forestry Chronicle*, 74(3), 385-392.
- Barkley, B., Patry, M., Story, P., & Virc, S. (1997). The eastern Ontario model forest: Acting locally, connecting globally. *Forestry Chronicle*, 73(6), 723-726.
- Betts, M. (1997). Community forestry in New Brunswick. *International Journal of Ecoforestry*, 12(3), 247-254.

- Jaggi, M. (1997). Current developments in aboriginal forestry: Provincial forest policy and aboriginal participation in forestry in Ontario, Canada. *International Journal of Ecoforestry*, 13(2), 13-20.
- Burda, C., & M'Gonigle, M. (1996). Tree farm or community forest? *Making Waves*, 7(4), 16-26.
- Allan, K., & Frank, D. (1994). Community forests in British Columbia - models that work. *Forestry Chronicle*, 70(6), 721-724.
- Duinker, P., Matakala, P., Chege, F., & Bouthillier, L. (1994). Community forests in Canada - an overview. *Forestry Chronicle*, 70(6), 711-720.
- Dunster, J. (1994). Managing forests for forest communities: A new way to do forestry. *International Journal of Ecoforestry*, 10(1), 43-47.
- Harvey, S., & Hillier, B. (1994). Community forestry in Ontario. *Forestry Chronicle*, 70(6), 725-730.
- Mallik, A. U., & Rahman, H. (1994). Community forestry in developed and developing- countries - a comparative-study. *Forestry Chronicle*, 70(6), 731-735.
- Taylor, D., & Wilson, J. (1994). Ending the watershed battles: BC forest communities seek peace through local control. *Environments*, 22(3), 93-102.
- Harvey, S. (1993). Community forestry gets rooted in Ontario. *Alternatives - Perspectives on Society, technology and environment*, 20(1), 46-46.
- Matakala, P. (1993). Community forestry in Ontario, from conflict to cooperation: The Teme-augama Anishnabai case. *Making Waves*, 4(3), 5-7.
- Pinkerton, E. (1993). Co-management efforts as social movements: The Tin Wis coalition and the drive for forest practices legislation in British Columbia". *Alternatives*, 19(3), 33-38.
- Duinker, P., Matakala, P., & Zhang, D. (1991). Community forestry and its implications for northern Ontario. *Forestry Chronicle*, 67(2), 131-135.
- Fletcher, C., & M'Gonigle, M. (1991). The forces of governance, and the limits of law: Community involvement in forest planning. *Forest Planning Canada*, 7(3), 24-31.
- Hammond, H. (1990). Community control of forests. *Forest Planning Canada*, 6(6), 43-46.
- Dunster, J. (1989). Concepts underlying a community forest. *Forest Planning Canada*, 5(6), 5-13.
- Roy, M. A. (1989). Guided change through community forestry: A case-study in forest management Unit-17 - Newfoundland. *Forestry Chronicle*, 65(5), 344-347.
- Marshall, F. (1986). Community forest licences, and other thoughts on wise forest management. *Forest Planning Canada*, 2(6), 8-11.

Selected Sources on Community Forestry in Canada

Auden, A. (1944). Nipigon forest village. *Forestry Chronicle*, 20(4), 209-261.

Wilson, E. (1943). Forestry in post-war rehabilitation. *Forestry Chronicle*.

Cain, W. C. (1939). Forest management in Ontario. *Forestry Chronicle*, 15(1): 16-28. Canadian Society of Forest Engineers. (1943). A statement of forest policy. *Forestry Chronicle*, 19(1): 56-63.

Richardson, A. H. (1938). Forestry in Simcoe County, Ontario. *Forestry Chronicle*,

MacDonald, J. A. (1935). A plan for reforestation relief works projects in southern Ontario. *Forestry Chronicle*.