



An engaging approach to managing non-timber forest resources

Introduction

It's been many years since government and other stakeholders have attempted to develop and introduce some form of formal management for non-timber forest resources (NTFRs). The provincial government's efforts in the 1990s through the Pine Mushroom Task Force failed to result in any action and a renewed effort in the early 2000's to develop a series of pilot projects to test various management assumptions also ended in no action. While we did learn a great deal through those exercises, are we any further ahead in our knowledge about what to do to ensure the NTFR sector remains sustainable and vibrant, communities have alternative livelihood strategies, and the sector is not ignored amidst the current focus on various new goods and services associated with the emerging 'bio-economy'? Government needs to understand how it can more effectively re-engage with the NTFR sector, provide the appropriate arrangements for access to the resource, and structure how the sector can contribute to or at least participate equally within the bio-economy. This Rural Opportunities extension note suggests a solution that relies on the users themselves, while establishing more beneficial interactive links among those involved with resource use, its stewardship and management.

The Case for Management

Why should government bother? Are there too many users? Are overzealous harvesters damaging the environment? Are we missing opportunities? On the other hand, does the lack of access restrictions and management simply allow for the most efficient use of these non-timber resources? The answers to these questions vary across resource and geographic lines, but why is there a body of thought directing us towards increasing management effort? Why do we always return to the question of management for NTFRs? Part of the answer to that question reflects the variety of case studies and observations indicating that 'open access' to resources (the ability of anyone to walk into, in our example, the forest and take understory plants and mushrooms) can and does lead to overharvesting and resource degradation under certain conditions for certain species, thus some form of management or rules is necessary to avoid these outcomes (see Ostrom, 1990). The problem facing government or any land owner is that NTFRs, like any resource, are not limitless and are not easily fenced or divided among users to ensure sustainable use or encourage any investment in effort and/or money. As a result, users might deplete the resource as they compete against each other for product and a land owner, manager and other stakeholders will face



challenges creating, agreeing to, enacting and enforcing rules, such as limiting access to the resource and the volume to be harvested, thereby encouraging investment and achieving sustainability objectives.

Another part of the answer, however, does not involve restricting access, instead using management tools to open the forest and its resources to more intense but efficient use by encouraging certain groups to use more of what is in the forest or what is left behind as waste from other industrial operations. So management can be used to both limit and create opportunities. The NTFR sector tends to benefit from neither focus, existing within a policy or management vacuum where we struggle to limit use where limits are necessary and struggle to expand use where opportunity exists. There may well be risks associated with either focus, and many of those who operate in the non-timber sector do not necessarily want this added attention.



Photo courtesy of Wendy Cocksedge

The picture of the NTFR sector hidden beneath the trees is exceedingly accurate. The challenge and key to any management effort is to engage with the actors involved in or linked to

this activity, but at a level appropriate to the resource, users and other claims to the forest. The first step to successfully balance these two management objectives and begin a dialogue with the users and other stakeholders is to understand the interactions among actors (if, when and under what circumstances do they talk or exchange information) and to find the appropriate level of engagement (how they interact and their roles) for each actor. Creating an understanding of the current structure then adapting it to better reflect the needs of the resource and its user community can be either a bottom-up or top-down exercise.

Mapping the Actors

In the forest and NTFR sector actors include the land owner (public, First Nations or private), harvesters, buyers, distributors, wholesalers, retailers, final end users, government personnel at the policy and operational levels, and other users such as the forest industry. Each actor has a particular role in or connection to the movement of an NTFR from the forest to its final use, all connected through that particular resource's 'supply chain'. Roles and responsibilities are developed by the laws we establish, emerge through customs and norms of practice, and reflect our expectations of how we should interact with each other and the resource of interest. Thus, many people in the NTFR sector who harvest for personal or commercial purposes, while operating under few 'formal' rules or government related regulations, have developed 'informal' operating norms of practice. These norms of practice will vary by resource types, geography and by the users and their commitment to the longer term health of the resource. Those closest to the forest, those who work in or manage the forest, have the greatest role in ensuring these expectations of proper resource use are met, and are the focus of this discussion.

The relationships among the actors identified in the previous paragraph can be mapped to reveal where interactions occur, and



perhaps more importantly where they do not occur, indicating who could or should become engaged in any management effort. Through this example it is clear that imposing a management regime without the knowledge of the way in which these actors interact may completely miss where attention is required, or may infringe on and harm old or traditional relationships that may only require subtle attention. The intensity of that engagement will depend on the intensity of resource use and potential for depletion. Initial mapping can reveal sources of strength and failure within current resource arrangements.

In this hypothetical example the links between the NTFR sector and forest industry are weak to non-existent, with any relations either occurring second hand through the local forest district office or via chance interactions at the resource level (e.g., bush or logging road encounters). An examination of who the NTFR harvesters are, what and how they harvest, the rules they establish or follow may also reveal unsustainable practices and strained relationships among other local and/or non-local users. Alternatively, it may reveal an active group of individuals working collectively to overcome some particular issue. In this example, the relationship between the NTFR company and the forest district may be informal leading to some attempts to manage the local resources, but in a policy area outside of formal management jurisdiction. These non-existent or loose informal relationships can be further clarified by examining how the NTFR harvester gains access to the forest and the knowledge of who plays what part within these various informal and formal roles.

This example is not to suggest that a formal management structure (i.e., through government regulation) is necessary, but that the roles of each actor needs better definition. For example, the NTFR harvesters and company may need to decide, given their knowledge of the resource, how to lessen their impact on the resource, or how to ensure higher quality product is harvested using better harvesting methods, or

how to more effectively market their product. Users who increase their level of communication may begin to speak of known problems and may develop more collective approaches to overcoming specific challenges experienced by harvesters. The local forest district stewardship officer may discover a way to manage safety issues more effectively, or may see the need to develop more formal policy to ensure appropriate access to the forest, thus linking to the government policy level in an attempt to further various policy ideas.

This depiction reflects, perhaps not the issues each actor deals with, but the way with which issues are dealt within this ad hoc or case-by-case resource management environment. A team of individuals with an interest in more effective management of NTFRs could avoid this interaction and engagement failure by bringing the knowledge of each role to a planning table. However, the actors must have an interest in this enhanced type of interaction. Here lays the challenge often noted in the NTFR sector – a lack of desire to participate for fear that government will either attempt to prohibit access or will introduce user fees. How engaged government would become is related to the seriousness of the issue. However, this exercise is not necessarily top-down. Local NTFR companies or groups of harvesters can also develop an interaction map to identify with whom they may need to engage in an effort to improve access or other working conditions. This map likely already exists either drawn on paper or in many cases as a mental image.

Increasing the Role of Users in NTFR Management

There are significant opportunities for local harvester or NTFR company associations to take a greater role in NTFR use and management. Achieving the full benefits of this potential, however, involves moving towards a compatible management model (Cocksedge, 2006; Berch



and Kranabetter, 2010) or developing a form of stewardship agreement for the inter-harvest timber management of a forested area (Tedder, 2008). This approach would significantly increase the presence and participation of the non-timber sector in forest (as opposed to timber) management and could also be the model to consider for future development of the many products associated with the 'bio-economy.' The interactive map identifies the players necessary to move towards this management model, but more critical than knowing who should be involved is getting the commitment from each actor or participant group. Examples of activities within a stewardship agreement include the scheduled harvest of boughs and understory resources prior to timber harvesting, or tending the free-to-grow forest and understory through appropriate pruning and spacing techniques. In addition, the agreement would ideally lead to establishing various research and production trials to determine the most efficient harvest, transport and processing methods, the resources to target and an analysis of products to find the highest valued uses.

It remains, however, that the NTFR sector will continue with or without this type of engagement among local users, NTFR and forest companies, or government. It will likely seem to some readers that this level of effort would lead to little actual change – the various players are just not willing or in a position to affect and maintain change. As noted in the first paragraph, our failure to achieve any increase in management effort is notable. Why is now any different? Certainly, government and forest users are aligned in their concern over maintaining the timber supply. However, through an emerging focus on the development of a broader forest sector – the so called bio-economy – that includes hopes of greater economic activity using the same land base and with linkages to climate change mitigation, a 'policy window' may be opening through which the efforts and lessons from the past may have an opportunity to see some light of day.

Additional Readings

- Berch, S. M. And J. M. Kranabetter (2010) Compatible management of timber and pine mushrooms. B.C. Min. For. Range, For. Sci. Prog., and Cent. Non-Timber Resources, Royal Roads, Univ., Victoria, B.C. Land Manag. Handb. 64.
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- Tedder, Sinclair. 2010. Common pool resources and state intervention: why, when, and how. Ph.D. Dissertation. Vancouver, University of British Columbia.
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