



ASSEMBLY OF FIRST NATIONS

Aboriginal Traditional Knowledge and Intellectual Property Rights

Discussion Paper



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Introduction:

Over the past few years, contemporary interest in Aboriginal Traditional Knowledge (ATK) has brought new opportunities to explore concepts, contexts and ethical use in policy regimes; however, there are challenges in determining definitions, ethical considerations in conjunction with legal concepts related to Intellectual Property rights (IPRs). ATK is culturally, historically and politically determined; it is location specific and reflects the unique conditions of distinct cultures and peoples in specific geographic locations. Policy, ethical, and use considerations must centre on this understanding.

First Nations have been struggling with existing legal regimes to accommodate their unique cultural values. Simply integrating traditional knowledge into the current legal system related to IPRs has resulted in resistance from aboriginal populations. Aboriginal people are concerned about the appropriate use and protection of their knowledge. Many have considered knowledge-gathering activities as another form of colonization and exploitation, where this knowledge can be exposed, abused or used against Aboriginal empowerment.

Despite the numerous advantages derived from ATK use, western legal systems and concepts often conflict with ATK holders. Most countries protect knowledge through IPRs which refers to the legal recognition of ownership over created knowledge or inventions. IPRs are used to foster economic activity by granting a monopoly right over a creation, which secures an intellectual property (IP) holder from intellectual theft by others. The qualifications necessary for an IPR generally prevent Indigenous Peoples from owning their knowledge, yet they allow for third parties to claim, patent and benefit from ATK. In certain scenarios, this may mean that sharing ATK results in legally protected acts similar to theft and biopiracy in spirit. Unfortunately, under current IP laws there is a significant risk that First Nations offering access to ATK in good faith may lose the rights to their knowledge.

The fundamental challenge lies in determining whether or not the two different concepts of IPRs and ATK can be merged. Throughout this process, it would be up to the First Nations to determine if and how their ATK can be applied or not. Many First Nations would prefer the establishment of a parallel ATK process in conjunction with the IPR system. However; it is necessary for the Government of Canada to establish concrete mechanisms that will properly protect ATK and the First Nations that possess it. Without proper IP reform, First Nations will continue to have reservations in providing third parties with information related to traditional knowledge, which will subsequently hinder or prevent the basis of forming strong knowledge-sharing partnerships.

This discussion paper will be considering the general application of the current Canadian IP regime to ATK and seeks to generate discussion surrounding possible IP reforms. The benefits and disadvantages to certain methods of ATK protection will be discussed in order to explain the legal and policy options. The primary purpose in compiling this document is to facilitate ongoing discussions and provide constructive insight into a complex topic. However, it is not to be construed as an expression of an official position of the Assembly of First Nations.

What is Aboriginal Traditional Knowledge?



Aboriginal Traditional Knowledge is not a concept that is easily defined or categorized. However, it can be generally described as the customary ways in which aboriginal peoples have done or continue to do certain things or activities, as well as the new ideas or ways of doing things that have been developed by Aboriginal peoples which respect their traditions, cultures and practices. Many of these customary ways have been passed on from generation to generation and are considered sacred. This unique body of knowledge is culturally based, context specific, holistic and differs from nation to nation.

The Royal Commission on Aboriginal People (1996) has also described indigenous knowledge as “oral culture in the form of stories and myths, coded and organized by knowledge systems for interpreting information and guiding action...a dual purpose to manage lands and resources and to affirm and reinforce one’s relationship to the earth and its inhabitants.”

ATK can also be seen as the summation of all knowledge, information, and traditional perspectives relating to the skills, understandings, expertises, facts, familiarities, justified beliefs, revelations, and observations that are owned, controlled, created, preserved, and disseminated by a particular Indigenous nation. ATK is comprised of a holistic body of knowledge and it remains the sole right of the community to determine what knowledge establishes their ATK.

It is important to note that these are general definitions and do not necessarily reflect or conform to the definitions held by ATK holders. However; the definitions rightfully illustrates the complexities in defining ATK, these challenging aspects will provide the basis of this discussion paper and will be re-examined and discussed further in relation to IPRs.

Intellectual Property Overview:

An intellectual property right refers to the legal ownership of intellectual creations. The Intellectual Property Office of Industry Canada has defined IP as:

“the legal rights that result from intellectual activity in the industrial, scientific, literary and artistic fields. IP rights, whether in the form of patent, trade-marks, copyrights, industrial designs, integrated circuit topographies, or plant breeders’ rights reward this intellectual activity.”¹

There are two key phrases that are used within Industry Canada’s definition that have provided clarification to the nature of IP: “reward” and “intellectual activity.” The reward referred to is a monopoly right over the product of an intellectual activity which means that only the IP owner can benefit from his product. An essential aspect to this is that the product cannot be replicated by others without express permission of the IP owner. An example of a product could be a song, a new medicine, or a new computer system. Similarly, the IP owner possesses the exclusive right to benefit from his product. The intellectual activities worthy of such an award are circumscribed to those that are original.

The originality requirement stipulates that an intellectual product must be unique. This means that IP does not protect products that are the same as other protected products. Products or creations in the public domain are not eligible for IP protection. Similarly, public domain creations or

¹ Canadian Intellectual Property Office, “Learn About IP,” *Canadian Intellectual Property Office*. Accessed 16 June 2010 online at: http://www.cipo.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr00011.html



inventions are considered “prior art,” and may prevent the patenting or copyrighting of a new invention or creation. Originality does not preclude IP protection on a product that is an improvement on an already protected product. Rather, originality is deemed to exist “whenever a work or product is created by the author, has not been copied, and involved some undefinable [*sic*] quantum of time, labour, skill and/or judgement.”² New versions of inventions are eligible for a new patent and new interpretations of existing art are eligible for “neighbouring rights,” which are nearly identical to copyrights in spirit.

Essentially, IP is a **proprietary** system that protects **unique, individual** products or creations in a tangible form. Thus, ideas in books are protected by the book copyright and the ‘prior art’ status of the information within; songs are copyrighted in the form of transcripts and recordings; nucleotide sequences are patented to protect genetic creations; and the schematics and tangible form of an invention are patented to protect new technologies.

Theft, Misuse, and Misappropriation Overview:

IP is constructed to promote the commercial use of new knowledge and inventions; therefore, it often does not extend to ATK and poses serious concerns related to its preservation and protection. This has resulted in the ATK being frequently stolen, misused, and misappropriated. Detailed discussion of these practices will occur later in this discussion paper although a brief overview is necessary at this point.

Unfortunately, Aboriginal peoples holding ATK are vulnerable to theft, misuse, misappropriation, and biopiracy. These refer to immoral and actions perpetrated by third parties of ATK holders and their unique knowledge. In this context, theft denotes taking ATK without express and freely granted permission. Misuse means using ATK in a way contrary to the views expressed by the ATK holder resulting in misleading interpretations, or otherwise directly violating the intent and value of the knowledge. Misappropriation generally denotes plagiarism and fraudulent use of ATK, although it can also mean illegal use of ATK content. This may be in a commercial or academic context. Biopiracy occurs when a third party secures IP protection for stolen ATK in order to ensure future profits.

In industry, improper, illegal, and immoral ATK use generally occurs to generate and benefit from the high profits produced by its distribution. Since ATK is subject to no protection under current IPRs and industry can easily access IP protection for its inventions, ATK is often stolen by a company or firm to profit from its unique knowledge base.

A fundamental concern related to ATK has been the frequent misuse, misappropriation and stealing of its concepts. Generally, professionals utilizing ATK have wrongfully discounted the validity of the knowledge and thus misinterpreted or completely failed in citing their sources. Studies that are published using unauthorized ATK disseminate the knowledge to the general public. For First Nations and Indigenous Peoples, the public circulation has resulted in a loss to all legal claims to the ATK. At times, as a defensive strategy, Indigenous communities have been hesitant to share their ATK in an attempt to prevent industry from patenting and profiting from it. There have been instances whereby ATK related to medicine and biodiversity has been patented by researchers and then sold to industry for significant profits.

² D. Vaver, “Canada’s Intellectual Property Framework: A Comparative Overview,” *Canadian Intellectual Property Office*. Accessed 16 June 2010 online at: [http://www.ic.gc.ca/eic/site/ippd-dppi.nsf/vwapj/01-EN%20Vaver.pdf/\\$file/01-EN%20Vaver.pdf](http://www.ic.gc.ca/eic/site/ippd-dppi.nsf/vwapj/01-EN%20Vaver.pdf/$file/01-EN%20Vaver.pdf)



At this time, only IP laws and private contracts are legally enforceable in Canada. However; IP laws rarely extend to ATK and the efficacy of private contracts varies depending on the situation. Ethics considerations are voluntary and, at most, may impact an individual breaking a company or university's code. No access and benefit sharing regime has officially been constructed at this time. Many countries currently have access and benefit sharing regimes based on IP and private contract law which, with a few notable exceptions, have not halted theft and biopiracy. This is mostly because IP laws vary between countries and access and benefit sharing regimes are unable to prevent a third party from seeking an IPR in a third country.

Theft and biopiracy frequently occur as a result of ATK in comparison to the requisites to meet IP laws and their significant incompatibilities. Currently, IP exists to exclusively pursue individual economic benefits, not for cultural preservation that is held collectively by a community. For Indigenous Peoples, the notion of IP protection "is a misnomer because the corporations use patent law to their advantage by discrediting the Indigenous Peoples' historical proprietorship over the plants and cultural knowledge."³ The establishment of a legal system that encourages intellectual theft over their ATK has been described as a new colonial experience that closely mirrors the past "where local types of knowledge were denied, marginalized, oppressed and nearly destroyed [. This] adds to the moral, cultural and political significance of what are perceived as current neo-colonial practices of appropriation of indigenous knowledge nowadays."⁴

Merging ATK Definition into the IPR Construct:

It has become evident that the concepts surrounding ATK and IPRs are contradictory on fundamental levels and has had unfair implications on ATK holders and Aboriginal peoples, in general. An example which illustrates this incompatibility is within the definition of ATK, as previously discussed. ATK is contrary to current IP laws and they are in direct contravention of each other. Consequently, the concepts of ATK make it extremely difficult for First Nations to access the necessary protection that is not afforded by existing IP laws and legal concepts. This poses a considerable challenge in protecting the content of the knowledge making it vulnerable to misuse, resulting in First Nations' being subject to unfair and inequitable conduct. IPR also requires a more precise definition of ATK which would result in a modification to its overall concept in order to define ownership and novelty. Furthermore, the definition of ATK must remove itself from other forms of knowledge. ATK must then submit itself to a western style knowledge taxonomy in which individual pieces of knowledge can be traced and owned. Many complexities arise as it relates to ATK especially when taking into consideration the unique aspects of collective ownership by Aboriginal people. Unfortunately, it does not adhere to the current standard of societal or legal norms of European knowledge.

The components of ATK that would be subject to IP protection must exist in a protectable form which refers to how it is stored and transferred. Storage and preservation of ATK differs between communities and may exist in various forms including, but not limited to: stories, language, songs, symbols, proverbs, practices, ceremonies, folklore, art, paintings, drawings, laws, customs,

³ M. E. DeGreet, "Biopiracy: The Appropriation of Indigenous Peoples' Cultural Knowledge," *New England Journal of International and Comparative Law*

⁴ J. Busingye, W. Keim, "The Political Battlefield: Negotiating Space to Protect Indigenous and Traditional Knowledge under Capitalism," *International Social Science Journal*, 195 (Oxford: UNESCO, 2009).



rituals, inventions, understandings, medicines, technologies, expressions, or identities. Within the Aboriginal context, a general method of preservation does not exist, in fact, it is often considered an “animate” concept and holistic in nature. The knowledge is generally retained in a manner that preserves this holistic concept and is within the context of relationships, actions, processes, and thoughts. In contrast to the IP system, it makes it infeasible to protect a comprehensive, holistic, intangible system.

The transfer or sharing of ATK relates to two factors: the ownership of ATK and the nature of transmission. As previously indicated, ATK is collectively owned by a specific Aboriginal community versus individually, as required to determine IP. However, this does not mean that every individual within the community has the authority to share the knowledge. The authority to share or transfer knowledge may be held by certain individuals within a community. Currently, IPR does not extend to collective communities; it is restricted to individuals and corporate bodies. Within the legal context, a community may patent a component of ATK with an individual although, this is inconsistent with the principles of ATK as it is not intended to be solely “owned” by anyone. In addition to this, patents provide legal protection for a maximum of 20 years. Thereafter, the knowledge will become available within the public domain. This is another key area of concern; as previously discussed, ATK is a collective knowledge-base without a precise timeline.

Transferring knowledge within the community may be done through various methods, including generational transfers (for example: an elder teaching a young person), observation, education, ceremony, or any other method that a community may employ at its own discretion. Similarly, valid sharing of ATK with third parties occurs completely at the discretion of a community through any method the community may see fit.

It is important to consider how traditional knowledge is created. This question bears direct relevance to the novelty of ATK and can be used to determine whether or not a specific component of ATK can be considered prior art. Again, there is no clear answer because it varies between nations and their respective knowledge systems. Deborah McGregor, a professor of Aboriginal Studies and Geography and a member of the Anishinabe First Nation, offers a useful generalization for the sources of ATK: empirical knowledge (i.e., gained through observation) and revelation (acquired through spiritual origins).⁵ Since ATK is constantly growing and adapting, it is reasonable to state that ATK is also created through modification of other knowledge; that is, through interpretation of other knowledge systems through a traditional paradigm.⁶ These are an example of four sources of ATK; however, ATK can be created through any method whatsoever provided that it is done so by an Aboriginal community in a way that reflects the traditions, cultures, beliefs, or practices of that community. It is unlikely that unique empirical observations count as prior art and the protection of revelation in the patent system is unclear.

Patents:

Patents are the exclusive rights granted to an inventor in return for the public release of an invention or know-how. Patents last 20 years from the filing date. Patent applications are made

⁵ D. McGregor, “Coming Full Circle: Indigenous Knowledge, Environment, and Our Future,” *American Indian Quarterly*, 28::3-4 (2004): 385-410

⁶ M. Fitzmaurice, “The Dilemma of Traditional Knowledge: Indigenous Peoples and Traditional Knowledge,” *International Community Law Review*, 10 (2008): 255-278



public 18 months after filing “in order to promote the sharing of knowledge.”⁷ Once granted, a patent gives “the exclusive right, privilege and liberty of making, constructing and using the invention and selling it to others to be used, subject to adjudication in respect thereof before any court of competent jurisdiction;”⁸ in other words, a patent gives an exclusive proprietary right over an invention.

The *Patent Act* defines patents as extending to “inventions,” but which inventions are covered? In general, patents protect any processes, machines, manufacturing techniques, “compositions of matter,” and “any new and useful improvement of an existing invention.”⁹ With respect to, inventions could extend to medicines (but not medical techniques), plant derivatives, fishing and hunting techniques and technologies, genetic resource uses, land/resource management systems, and other traditional practices.

Patents can protect some of the most lucrative components of ATK that are sought by industry and academia. However, First Nations communities may not be the ones benefitting from patentee status. While ATK holders own the knowledge envied by third parties, genetic resources, plant derivatives, and medicines are often stolen from ATK holders through a practice known as “biopiracy.” Biopiracy is possible because of the way the patent system works.

Patents in Canada protect whoever applies for a patent on a first-come basis, which means that patents do not necessarily protect whoever actually created an invention. Patents are not granted in instances where “prior art” is determined. However, since ATK is in the possession of First Nations communities and not always available to the general public or patented, prior art is difficult to establish. Thus, when industries engage in “bioprospecting,” or consulting with Indigenous Peoples about local flora with medicinal properties, they are readily able to patent their unique medical or industrial “inventions.”

Academics are also guilty of biopiracy – although generally not for the express purposes of profit. Medical, scientific, anthropological, management, and ethnobotanical studies uncover traditional medicines, techniques, systems, and genetic resource uses that are sometimes patented by the investigative team. This patent is held by the university or the academic team and is used to ensure exclusive rights to study the invention. However, the patent may be sold for commercial purposes in the future. Thus, academia can easily be involved in biopiracy. In these instances, the information provided by the community is provided and utilized although, they do not benefit from any of the commercial profits to which they should be entitled.

Unfortunately, large categories of ATK are ineligible for patent(s) and are unable to meet the necessary requisites. In addition to this, First Nations in Canada do not possess the interest in modifying the ATK to meet patent requirements, although some ATK components may be eligible. ATK is often ineligible for patent protection for three reasons:

(i) the requirement that a patent be granted to an individual or corporate body, (ii) the “ingenuity” requirement, and (iii) the “novelty” requirement. An Indigenous nation as a collective cannot patent its knowledge under Canadian law. An individual representative or the government of a

⁷ Canadian Intellectual Property Office, “Frequently Asked Questions – Patents,” *Canadian Intellectual Property Office*. Accessed online

⁸ *Patent Act* [R.S., 1985, C. P-4], s. 42

⁹ Canadian Intellectual Property Office, “A Guide To Patents: Part I,” *Canadian Intellectual Property Office*, accessed 16 June 2010 online at: <www.ic.gc.ca/eic/site/ciapointernet-internetopic.nsg/eng/wr01090.htm>



Nation could although this is contrary to the values of First Nation culture and is rarely exercised. Furthermore, since ATK is often passed between generations, patentable ATK components are not “novel” to Indigenous Peoples seeking protection. Industry and academia have used this problem to their advantage by claiming a patent in the name of a corporation (i.e., the company or university), claiming new methods of ATK use, and claiming originality over the methods and application.

First Nations and Indigenous Peoples and their ATK have not benefited from the existing IP system. Patenting requires disclosure of information and protection lasts a relatively short time – 20 years from the filing date. Since patents do not prevent improvements on an invention, disclosure allows for ATK to be used, adapted and repatented by industry without consulting or paying ATK holders. After 20 years, the ATK falls within the public domain, meaning that anyone can use it without recourse. Thus, patents offer very limited protection over ATK. When taking into account these requisites for IPRs, the notion of patenting is so far removed from the essence of ATK that it is not considered an option by First Nations.

The limited protection offered by patents is not appropriate and unacceptable for ATK. Especially when taking into consideration, the holistic nature of ATK and the overall benefit of community members. The holistic and living nature of ATK means that it exists in context, not in individual components. The patent system demands the commoditisation of separable components of ATK for profit which is not compatible with the nature of Indigenous knowledge.

Copyrights:

As defined by the Canadian Intellectual Property Office, a copyright “means ‘the right to copy.’” Copyrights automatically exist whenever original work is created, and the right lasts the entirety of an author’s life plus 50 years. Copyrights exist to protect “works,” which is loosely circumscribed to cultural, literary, musical, and creative works. Copyrights apply to “all original literary, dramatic, musical and artistic works [including] books, other writings, music, sculptures, paintings, photographs, films, plays, television, and radio programs, and computer programs [...], sound recordings (such as records, cassettes or compact discs), performer’s performances and communication signals.”¹⁰ Limited “neighbouring rights” exist for original interpretations of existing work. Since authors need not file for a copyright, there is no strict “test” an author must pass. Copyrights are owned by the creator of a work, the person who commissions a work, or an employer paying employees to produce original work.

Copyrights present an interesting problem in the ATK context. ATK that is expressed through creative form, for examples stories or ceremonies, can theoretically be protected by copyright. The actual knowledge passed through these methods is not protected, but rather the method itself. This would work to prevent, for example, a for-profit replication of an Indigenous ceremony or a dishonest portrayal of it. However, ATK is not eligible for copyright since, due to its intergenerational nature, there is no clear creator to own a copyright.

Releasing ATK in a copyrighted form presents further difficulties. Once, the knowledge is released it can be replicated freely in compilations and fiction, since each will likely pass the

¹⁰ Canadian Intellectual Property Office, “A Guide to Copyrights,” *Canadian Intellectual Property Office*. Accessed 15 June 2010 online at <<http://www.cipo.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr02401.html>>



“originality” test.¹¹ The knowledge can be altered into different forms that would then be eligible for patent. Generally, First Nations do not view their ATK as a commodity that needs to fit within this regime or to be utilized to generate profits.

Trademarks:

A trademark is a short series of words, an image, a design, or any combination of the three that identifies the goods, products, or creations of a specific person or organization. Trademarks can last indefinitely and are owned exclusively by an individual or corporation. However; accessing trademark protection is limited and does not protect ATK. First Nations should not have to “bribe” companies into respecting ATK by modifying its concept to fall into the category of a trademark.

Plant Breeders’ Rights:

Plant Breeders’ Rights are similar to patents but refer specifically to plant varieties. The creator of a new plant variety has the exclusive right to sell reproductive material and produce from the variety. The requirements to meet the standard of “variety” must be new, uniform, distinct, and stable and the protection afforded lasts to a maximum of 18 years. In circumstances, where ATK extends to breeding plant species, this IPR may be available. It would effectively stop third parties from stealing any plant variety created through ATK. A major concern related to this involves the nature of ATK and plants utilized in this aspect. The essence of ATK involves respect for the natural environment including plants as medicinal ingredients. The imposition of requirements or timelines for protecting a natural source violates the principles of ATK. ATK as a unique concept should not be subject to specific timelines or the need to meet requirements of IPR’s.

Trade Secrets:

A trade secret refers to financially valuable information held by a business, company, or person. The holder of a trade secret has an indefinite legal protection against theft of the secret by another party, provided that the holder can prove protocols and measures to prevent the secret from leaking. The trade secret holder can pursue action against anyone who is told the secret in confidence and wrongfully discloses, sells, or otherwise inappropriately uses the secret. The use of trade secrets to protect ATK has been suggested within academic circles and by Industry Canada.¹²

There are several benefits and to asserting ATK as “trade secrets.” Trade secrets need not be “novel,” so the inter-generational nature of ATK would not prevent protection. Trade secrets are not disclosed to the public, meaning that ATK holders would not have to worry about the misappropriation of ATK in the public domain. Non-disclosure is especially important when considering the lack of standardized international IP law, meaning that disclosure after patenting

¹¹ D. Vaver, “Canada’s Intellectual Property Framework: A Comparative Overview,” *Canadian Intellectual Property Office*. Accessed 16 June 2010 online at: [http://www.ic.gc.ca/eic/site/ippd-dppi.nsf/vwapj/01-EN%20Vaver.pdf/\\$file/01-EN%20Vaver.pdf](http://www.ic.gc.ca/eic/site/ippd-dppi.nsf/vwapj/01-EN%20Vaver.pdf/$file/01-EN%20Vaver.pdf)

¹² M. E. DeGeer, “Biopiracy: The Appropriation of Indigenous Peoples’ Cultural Knowledge,” *New England Journal of International and Comparative Law*, 9:1 (2003):179-207; J. D’Amours, *Presentation on the Canadian Intellectual Property Regime* (March 11, 2003). Available online at: www.ic.gc.ca/eic/site/ippd-dppi.nsf/eng/ip01077.html



in Canada does not prevent a third party company from patenting the product elsewhere. Protection of a trade secret is indefinite – provided that the secret holder does not patent, publish, or in any other way release the secret to the public domain.

Trade secrets are also highly disadvantageous for ATK. Firstly, ATK is not eligible for categorization as a trade secret in scenarios where ATK will not be used for profit. Even where a trade secret does exist, government rules, regulations, and protective measures governing trade secrets are unclear and unpredictable.¹³ Regulating trade secrets falls within provincial jurisdiction¹⁴, although case law provides a standard for ruling on trade secrets issues. Trade secrets are not guaranteed protection and will not be afforded protection should the information leak into the public domain and breach of confidentiality cannot be proven. In practical terms for First Nations, this may mean that an individual grants permission for a third party to use a community ATK “trade secret.” Since the third party was granted permission from a trade secret holder, the trade secret may no longer exist. A patented idea overrides a trade secret, meaning that if some component of ATK is patented by a third party, the trade secret is gone along with all rights to recourse.

International ATK Theft:

Some international trade agreements and conventions facilitate ATK theft. International conventions and agreements interact with domestic laws and other conventions to create a complex international legal web that tends to disfavour small communities and individuals. Amongst these are the *Agreement on Trade-Related Aspects of Intellectual Property Rights* (TRIPS) and the *Paris Convention*. This section briefly considers how these international agreements interact with Canadian IP law to encourage theft.

TRIPS sets IP standards with the goal of protecting western corporations from theft in developing nations. Thus, TRIPS tends to reinforce private ownership rights and tries to pressure lower income countries into complying with standardised IP law. The agreement requires signatories to comply with the Paris Convention, which grants the “right of priority” to a patent-holder to seek a patent in other countries. Essentially, the “right of priority” means a person who receives a patent in a member country has a year to patent the same invention in other countries, thereby preventing international theft.

TRIPS and the Paris Convention combine to allow ATK-stealing parties to apply for a patent in one country and then receive a chain of patents throughout the globe. Considering that there is variation between domestic IP systems, it is possible a party may steal ATK in Canada, patent an invention in a country with loose laws regarding ATK, and proceed to use the “right of priority” to extend the patent to Canada, the United States and E.U countries. Thus, TRIPS allows a firm to use stolen ATK throughout the world in a way that makes it impossible for a First Nation ATK-based enterprise to compete.

Protecting traditional knowledge:

It is also important to point out current concerns about exclusive reliance on western models. The protection of traditional medical knowledge has been intensively discussed in the WTO TRIPS

¹³ J. Desrosiers, M. Nadon, “The Law of Trade Secrets in Quebec and in Canada: A Pragmatic Approach,” *The Lawyers Weekly*, September (2008)

¹⁴ *Ibid.*; *Macdonald v. Vapor Canada Ltd.* [1977] 2 S.C.R. 134



Council, in the context of the review of Article 27.3(b) of the TRIPS Agreement. Among the issues relevant to traditional medical knowledge are the following:

- protection of traditional knowledge, either through existing forms of intellectual property rights or other laws, or through a *sui generis* form of protection;
- prevention of improper patenting of public-domain traditional knowledge and plant genetic resources, including through the documentation and publication of such knowledge and resources (as part of searchable prior art);
- the relationship between the TRIPS Agreement and the Convention on Biological Diversity in general, and the operational implementation of the provisions of prior informed consent and fair and equitable benefit-sharing, as set out in Article 8(j) of the Convention on Biological Diversity (CBD)
- The relationship between the work in the TRIPS Council and intergovernmental discussions on this issue, such as in the CBD, WIPO, FAO, and UNCTAD (WHO/WTO, 2002).

The UNESCO Universal Declaration on Cultural Diversity in 2001, also demonstrated a commitment to recognize the “contribution of traditional knowledge, particularly with regard to the environmental protection and the management of natural resources, and fostering synergies between modern science and local knowledge” (Action Plan No14 of the UNESCO Universal Declaration on Cultural Diversity)

As well, the International Convention on Biodiversity suggested that the traditional knowledge of indigenous peoples around the world should be included as an important part of environmental decision making.

In Canada, the *Canadian Environmental Assessment Act* (CEEA) and the *Species at Risk Act* (SARA) have sought to recognize aspects of ATK. The Species at Risk Act enacted by Canada as part of its obligations as a signatory to the Convention on Biological Diversity (CBD). The CBD was one of the major outcomes of the United Nations Conference on Environment and Development held at Rio de Janeiro, Brazil in 1992. The CBD calls upon all the signatories to protect the biological diversity within their nation states by legislation or other means.

International ATK Protection Guidelines:

The international community has established numerous voluntary guidelines for protecting ATK, none of which have been followed in Canada. These guidelines can be found within the *United Nations Declaration on the Rights of Indigenous Peoples*, the *Convention on Biological Diversity*, and the *Akwé: Kon Guidelines*. More standards can be found in various declarations, including the *Kari-Oca Declaration*, *Julayinbul Statement*, and the *Kimberly Declaration*. These international conventions, declarations, and guidelines create a highly complex international regime of ATK protection suggestions. None of these guidelines are legally binding. Although these guidelines are not used in Canada, it is worth exploring some of these documents to create ideas for possible protective norms for Indigenous Peoples’ knowledge.

The *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) addresses ATK in articles 11, 24, and 31. Article 11 recognizes the Indigenous right to “maintain, protect and develop the past, present and future manifestations of their cultures.” Article 11 outright condemns past actions where “cultural, intellectual, religious and spiritual property [were] taken without their [i.e., Indigenous Peoples’] free, prior and informed consent or in violation of their



laws, traditions and customs.” Article 24 asserts that Indigenous peoples have the right to their traditional medical knowledge. Article 31 states that “Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, [] medicines, knowledge of the properties of fauna and flora...” Together, these three articles reject any colonisation of Indigenous knowledge/knowledge systems and call for some form of entrepreneurial protection of ATK, whereat the knowledge is protected from third party use and indigenous peoples can seek to benefit from the “manifestations of their sciences, technologies” *et cetera*.

The *Convention on Biological Diversity* (CBD) sets out several standards for treatment of Indigenous Peoples’ knowledge that are further defined by the *Akwé: Kon Guidelines*. Articles 8(j) and 10(c) of the CBD directly address the issue of traditional knowledge. 8(j) stipulates that member states will “respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and **promote their wider application with the approval and involvement of the holders of such knowledge,**” which combines with 10(c)’s guideline to “protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements. Thus, these two clauses establish that ATK should be respected and maintained when the knowledge is used for conservation or sustainable use, and that the knowledge should be shared in the public domain if the Indigenous or local community freely grants consent. This suggests that member states are obligated to seek the request of Indigenous communities prior to using ATK. The *Akwé: Kon Guidelines* builds upon 8(j) to create a high standard of ATK protection. The guidelines assert that Indigenous peoples are the owners and controllers of ATK and that ATK can only be shared on mutually agreed terms with prior informed consent.

In combination, the CBD (including the *Akwé: Kon Guidelines*) and UNDRIP suggest an IP system for ATK that:

- Recognizes Indigenous ownership of ATK;
- Does not mandate commercial/business/entrepreneurial uses as a condition of protection;
- Applies to tangible and intangible forms and applications of ATK;
- Mandates free and prior informed consent for third party ATK use;
- Rejects colonization of Indigenous knowledge by allowing only Indigenous Peoples to control the form and content of ATK.

In addition to this, the World Intellectual Property Organization (WIPO) has continued to engage in international policy discussions in the areas and issues related to Traditional Knowledge. WIPO has recognized that the policy issues concerning TK are broad and diverse; however, they have categorized IP issues into two key themes:

- **“Defensive protection** of TK, or measures which ensure that IP rights over TK are not given to parties other than the customary TK holders. These measures have included the amendment of WIPO-administered patent systems (the International Patent Classification system and the Patent Cooperation Treaty Minimum Documentation). Some countries and communities are also developing TK databases that may be used as evidence of prior art to defeat a claim to a patent on such TK; and



- **Positive protection** of TK, or the creation of positive rights in TK that empower TK holders to protect and promote their TK. In some countries, *sui generis* legislation has been developed specifically to address the positive protection of TK. Providers and users may also enter into contractual agreements and/or use existing IP systems of protection.”

These examples illustrate the creative alternatives that are being established by international bodies in order to accommodate the unique concepts of ATK.

IP Gaps Analysis:

Current Canadian IP laws are incompatible with First Nations’ ATK for the following reasons:

- IP laws represent a profit-based proprietary system protecting the individual, whereas ATK is collectively owned and is not part of an entrepreneurial system;
- IP laws require novelty, whereas ATK is passed down through generations, revelations, or through a particular empirical observation through a First Nation paradigm;
- IP laws require full disclosure to stimulate “innovation,” whereas ATK is a community-held resource that can only be disclosed on community terms;
- IP laws grant protection on a first-to-file basis, whereas the creation of ATK precedes all those who have stolen it;
- IP laws are based on a European concept of property which is not parallel to First Nations’ world views;
- IP laws are “component based,” meaning that they protect individual pieces or inventions within a knowledge system. ATK is holistic and represents entire knowledge systems, epistemologies, and paradigms;
- IP laws protect tangible inventions or written/recorded intellectual ideas. ATK is not necessarily tangible, written, or recorded;
- IP laws protect “static” knowledge, meaning that protection extends to an unchangeable piece of knowledge or invention, with new knowledge or inventions requiring new protection. ATK is a constantly evolving body of knowledge;
- IP laws do not protect “public domain” knowledge, whereas ATK has long been stolen and placed into the public domain;
- IP rights are not perpetual, whereas ATK is perpetually owned by the community;
- No single IP tool is capable of protecting ATK in its totality and it is infeasible to protect the totality of ATK through multiple IP tools.
- IP legal concepts have specific requirements in order to fall into an IP category, the concepts surrounding ATK do not meet the IP requirements.



Discussion:

Discussion of ATK misuse tends to turn to the historical trends of colonization and globalization. These concepts are worth mentioning since they touch on the great irony of non-Indigenous use of ATK; Indigenous Knowledge is an extremely powerful tool for asserting Indigenous rights and breaking the colonial mentality and hegemony of western knowledge, yet its use tends to lead to a new wave of colonisation. Colonisation takes the form of theft, and is furthered by the non-Indigenous “definitions that are often ‘imposed’ [on ATK] whether indigenous people like it or not (or agree with the definition or not).”¹⁵ Theft and the imposition of western paradigms on ATK, be it through definition or interpretation, is reinforced by IP rights that protect both of these improper practices.

The injustice of ATK theft is magnified by the epistemological milieu in which Indigenous knowledge is stolen. Western epistemology tends to discount ATK as static, “unscientific,” unverifiable, and unusable. In extreme cases, ATK has been dismissed as superstitious “values and practices [which] do not constitute knowledge” and that represent “a threat to environmental assessment.”¹⁶ Yet, this same system that rejects ATK as a form of knowledge also seeks to steal it. Thus, “the injustice is particularly poignant here; scientists dismiss the Indigenous knowledge as inadequate when assessed under patent law, yet respect their knowledge when they are used as a guide and educator of the source material.”¹⁷

Dismissal of ATK by the academic and policy institutes that steal it is often done under the auspices of “educational rigour” and consumer safety, both of which demand conformity to the scientific method. Therefore, ATK is often viewed as “the public domain of anthropological study,”¹⁸ which places Indigenous Peoples as the “subject of research by outsiders.” This means that ATK constitutes the subject of western study, but is rejected as a form of knowledge in its own right. ATK is accepted as knowledge only when it can fully conform to western epistemology, or can be proven through western empirical methods. Excusing the improper use of ATK under the guise of academic rigour results in the “depoliticizing of Indigenous Peoples and TEK [which] serves to make discussion of TEK more palatable to scientists by sanitizing it of the ugliness of colonization and injustice, so scientists can potentially engage with the knowledge but not the people who own and live the knowledge.”¹⁹

In short, the IP system protects the western system and its colonization of ATK, whereas it is incompatible with ATK. This is inappropriate, improper, and disrespectful to First Nations and their respective knowledge systems and represents the reinforcement of historical treatment of First Nations peoples. IP laws must be reformed and a separate legal regime within the IP system must be established in order to properly provide legal protection to ATK and to ensure that the

¹⁵ D. McGregor, “Coming Full Circle: Indigenous Knowledge, Environment, and Our Future,” *American Indian Quarterly*, 28:3-4 (2004): 390

¹⁶ F. Widdowson, A. Howard, “Aboriginal ‘Traditional Knowledge’ and Canadian Public Policy: Ten Years of Listening to the Silence,” Presentation for the Annual Meeting of the Canadian Political Science Association (June 1-3 2006: York University, Toronto, Ontario).

¹⁷ M. E. DeGeer, “Biopiracy: The Appropriation of Indigenous Peoples’ Cultural Knowledge,” *New England Journal of International and Comparative Law*, 9:1 (2003): 189-90.

¹⁸ *Ibid* p. 180; D. W. Gegeo, K. A. Watson-Gegeo, “‘How We Knot’: Kwara’ae Rural Villagers Doing Indigenous Epistemology,” *The Contemporary Pacific*, 13:1 (2001): 55-88

¹⁹ L. Simpson, “Anticolonial Strategies for the Recovery and Maintenance of Indigenous Knowledge,” *American Indian Quarterly*, 28:3&4 (2004): 373-384



“proprietary rights” of ATK remain with First Nations. While the recommendations made in this discussion speak to the Canadian system, the problem is global in nature.

Recommendations:

Within the context of the above discussion, the following points are recommended for ATK use in the context of Aquatic Management:

- The Department of Fisheries and Oceans should recognize that Aboriginal holders of ATK own all intellectual property rights associated with their knowledge and may, at their discretion, grant or withhold consent to using, accessing, or sharing that knowledge.
- Changes in any procedures or methodologies related to aquatic resource management or aquatic resource management activities must accommodate the holistic nature of ATK, meaning that knowledge and the form of transfer should be protected in a holistic way.
- The Department of Fisheries and Oceans should not encourage, accept or protect work based on stolen ATK.
- The Department of Fisheries and Oceans should consider a morality standard for work related to ATK. Similar considerations already exist for an author’s “moral rights” under copyright law.
- DFO should not require full disclosure of ATK specifics in aspects of management activities that touch upon ATK. With consent of the community, DFO may wish to disclose certain general ATK processes. Full disclosure may adversely impact a community’s ability to control the flow of its knowledge.
- Full control over ATK should be recognized as resting in the hands of a community. This means that traditional community protection laws should be recognized as legally enforceable within all aspects of the Canadian system.
- Department of Fisheries and Oceans, Industry Canada, Environment Canada, and Aboriginal Affairs should coordinate with First Nations to create a monitoring authority to identify instances of stolen ATK or First Nations intellectual property. The existence of such an authority would provide protection for First Nations who allow ATK to be used for resource management in good faith.
- DFO should support First Nations communities undertaking community led or joint studies to record and interpret their knowledge.
- DFO should encourage the participation of elders and traditional knowledge holders in resource management. When seeking participation of elders and knowledge holders, DFO should follow all community protocols and procedures.
- Aquatic resource managers should be urged to consider ATK in making informed decisions. Managers should use ATK in a way consistent to the wishes of knowledge holders.



- Aquatic resource managers must engage with ATK holders to identify and follow proper processes and protocols for accessing, using, interpreting and sharing ATK.



National Inventory of ATK Resource Protocols, and Experts

Database 2007-08

Region	First Nation	ATK Protocol	ATK Experts	Elders Council
Nova Scotia	Pictou Landing FN		Yes	
Nova Scotia	Unama'ki Institute	Yes	Yes	Yes
New Brunswick	Maliseet Nation Conservation Council	In progress	Yes	Yes
Quebec	Atikamekw Manawan	Quebec Harvest Plan	Yes	Yes
Quebec	AFN QL Sustainable Development	Yes	Yes	
Quebec	Algonquin Anishnabeg Nation Tribal Council		Yes	
Ont	Chiefs of Ontario		Yes	Yes
Ont	Akwesasne Mohawk Territory	Yes	Yes	Yes
Ont	Mushkegowuk Environmental Research Centre	Yes	Yes	
Ont	Anishinabek Ontario Fisheries Resource Centre	Yes	Yes	
Manitoba	Manitoba Keewatinook Ininew Okimowin	Yes	Yes	Yes
Saskatchewan	Federation of Saskatchewan Indian Nations	Yes	Yes	Yes
Saskatchewan	Montreal Cree Nation	Yes		Yes
Alberta	Technical Services Advisory Group			Yes
BC	Sliammon Powell River	Yes	Yes	Yes
BC	Nuu-chah-nulth Tribal	Yes	Yes	Yes



	Council			

Related Links

<http://mrc.uccb.ns.ca/prinpro.html>

http://www.ainc-inac.gc.ca/ch/rcap/sg/ska5e_e.html#Appendix%20E:%20Ethical%20Guidelines%20for%20Research

<http://www.nwmo.ca/Default.aspx?DN=50a48c69-3274-4e4b-9197-0c164af7823a>

<http://www.dfait-maeci.gc.ca/aboriginalplanet/750/resource/global/rewipo-en.asp>

<http://www.desertknowledgecrc.com.au/publications/downloads/DKCRC-Report-22-Traditional-Knowledge.pdf>

<http://www.nscons.ca/aboriginal.html>

<http://www.cpsa-acsp.ca/papers-2006/widdowson-howard.pdf>

http://www.acee-ceaa.gc.ca/012/atk_e.htm

http://www.ec.gc.ca/science/sandesept02/article1_e.html

<http://www.aboriginalcanada.gc.ca/acp/site.nsf/en/ao26878.html>

[Aboriginal Traditional Knowledge and Environmental Management](#) [hide description]

Aboriginal traditional knowledge has been and continues to be accumulated through time spent living on the land. It encompasses all aspects of the environment and sees humans as an intimate part of it, rather than as external observers or controllers.

 Source: Government of Canada; Environment Canada (EC)

[Aboriginal Traditional Knowledge Subcommittee – Committee on the Status of Endangered Wildlife in Canada](#) [show description]

 Source: Government of Canada; Government of Canada (GC)

[Arctic Borderlands Ecological Knowledge Co-op](#) [show description]



[First Nations Environmental Network](#) [show description]

[Nature and Utility of Traditional Ecological Knowledge, The](#) [show description]

Source: Canadian Arctic Resources Committee

[Traditional Knowledge and Mythology – Canada's Polar Life](#) [show description]

Source: University of Guelph

Suggested Reading:

J. Busingye, W. Keim, “The Political Battlefield: Negotiating Space to Protect Indigenous and Traditional Knowledge under Capitalism,” *International Social Science Journal*, 195 (Oxford: UNESCO, 2009)

Canada Intellectual Property Office, “Frequently Asked Questions – Patents,” *Canada Intellectual Property Office*. Available online at: www.cipo.ic.ca/ca/eic/site/cipointernet-internetopic.nsf/eng/wr00141.html

Canada Intellectual Property Office, “A Guide to Copyrights,” *Canada Intellectual Property Office*. Available online at: www.cipo.ic.ca/ca/eic/site/cipointernet-internetopic.nsf/eng/wr02401.html

M. E. DeGeer, “Biopiracy: The Appropriation of Indigenous Peoples’ Cultural Knowledge,” *New England Journal of International and Comparative Law*, 9:1 (2003): 179-207

M. Nelson, “Paradigm Shifts in Aboriginal Cultures?: Understanding TEK in Historical and Cultural Context,” *The Canadian Journal of Native Studies*, 25:1 (2005): 289-301