The Paq'tnkek Mi'kmaq and Kat

(American Eel – *Anguilla rostrata*)

A Preliminary Report of Research Results, Phase I SRSF Research Report #4

Prepared by

Social Research for Sustainable Fisheries (SRSF) St. Francis Xavier University

in Collaboration with

The Paq'tnkek Fish and Wildlife Society

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Introduction

On August 13th, 1993, Donald Marshall Jr., a status Mi'kmaq of the Membertou Band, located on Cape Breton Island, Nova Scotia, and two other eel harvesters, one Mi'kmaq and one non-native fishing with Marshall, were charged by Fisheries and Oceans Canada conservation and protection officers with fishing eel out of season, fishing with an illegal gear, and participating in commercial fishing without a license. They had been fishing eel in Pomquet Harbour when apprehended and charged. And, they were fishing with the intention of selling their catches.

Six years and a little over a month later (September 19th, 1999), the Supreme Court of Canada dismissed all charges laid against Donald Marshall Jr., ruling that Marshall and all Mi'kmaq have a treaty right (1760-61 Treaties of Peace and Friendship) to participate in the harvesting of marine resources for commercial purposes, as long as commercial fishing is intended to provide a 'moderate livelihood'. The Mi'kmaq Nation greeted this judgement with a sense of joy and relief. At last, treaty-based rights assuring access to valuable fisheries economic resources had been affirmed. With the affirmation of this right, the Mi'kmaq Nation has achieved a critical step in positioning its people to generate and support resource-based employment and economic development.

In all of the events that have followed the 1999 affirmation of treaty rights, it seems that very little, if any, attention and importance have been given the fact that Donald Marshall Jr. was fishing eel when charged. The Supreme Court specifically cites the treaty provisions for Mi'kmaq trading and selling of eel as one of the key basis for its decision. Obviously, the Mi'kmaq have a deep relationship with harvesting eel. Archaeological evidence demonstrates that the Mi'kmaq have been fishing eel among other species with harpoons, hooks, traps and weirs for thousands of years. The depth and meaning of this relationship is recognised widely within the Mi'kmaq community, especially among elders. It is

also acknowledged in the historical records, noted in the treaties, and mentioned in government documents, as well as preserved in the memory of the elders.

Donald Marshall Jr.'s eel fishing experiences in Pomquet Harbour have been described as extremely successful. "The catches were very good. The eels were extremely plentiful in the region and the catches the largest Mr. Marshall had seen in his career as a fisher. In one week the catch was well over one thousand pounds, the largest catch he had ever achieved. One other Mi'kmaq was fishing in the same area. He was also realizing good catches" (McMillan 1995:98). Since the early 1990's eel has become generally much less plentiful throughout the Maritime Region, as well as in Pomquet and Antigonish Harbours and in the rivers and lakes that feed them. This has been documented also by the *Paq'tnkek Fish and Wildlife Society* in the document '*Kat* (American Eel) Life History' (SRSF Fact Sheet 6, January 2002, p. 4).

The dramatic decline in the availability of eel, particularly within the Antigonish and Pomquet Harbours and related watersheds, led the Pag'tnkek Fish and Wildlife Society, in collaboration with Social Research for Sustainable Fisheries, based at St. Francis Xavier University, to develop a two stage research project that is intended to document past and present Pag'tnkek Mi'kmag relationships with and use of eel (Kat). The first stage of the research has been focused on thoroughly documenting eel fishing and use within Pag'tnkek households. The next stage will involve working closely with persons identified by the community as knowing a lot about fishing, preparing and cooking eel. Eel are considered as important to the Mi'kmag in a wide variety of ways, including to the Mi'kmag culture and way of life. The decline of eel threatens the Mi'kmag relationship with eel. Most importantly, the decline may also threaten Mi'kmaq knowledge of eel behaviour and habitat, as well as knowledge of the place of eel within Mi'kmag cultural, social and economic life. As a result of these factors, the Paq'tnkek Fish and Wildlife Society concluded that it is critical to document as thoroughly as possible local relations with and knowledge of eel. This report presents the preliminary results of the first stage of the research. The focus here is on reviewing important patterns and findings evident from the results of the household-centred study.

Before proceeding with this study, the Paq'tnkek Fish and Wildlife Society developed a research proposal outlining the study's general features and purposes. This proposal was submitted to the Mi'kmaq Research Ethics Board for review, advice and approval. Once the advice and approval were received, the Paq'tnkek Fish and Wildlife Society and Social Research for Sustainable Fisheries proceeded to design the study, as well as to develop the household questionnaire. The study was conducted between May 15th and July 8th. All of the interviews were conducted by two interviewers and took place within the participants' households. On many occasions and as anticipated in the research design, two or more household members participated in the interviews. Ninety-three of the ninety-eight 'on reserve' Paq'tnkek community households participated in the study, representing a 95% rate. This is an outstanding result, indicating the

interest of the community in the study as well as reflecting the diligence of the interviewers in their pursuit and conduct of the interviews. Rare is the study that attains such a high level of participation. Details of the research design and procedure, as well as copies of the ethics approval, contact and consent letters, and the interview questionnaire are presented in Appendix 1.

This report opens with a brief overview of key characteristics of the Mi'kmaq relationship with eel. Some of the archaeological and historical documentary evidence concerning this relationship is presented. Also presented are some of the critically important cultural meanings that the Mi'kmaq associate with eel. This is followed by a description of the Paq'tnkek Mi'kmaq community and its formation as a 'reserve'. These qualities are important features of the social and cultural context within the Paq'tnkek Mi'kmaq have developed their relationship with eel.

Characteristics of Mi'kmaq Relations with Kat

Kat is one of nature's resources. The Mi'kmag share a long cultural history with eel, as they do with many other marine life forms. Archaeological excavations of shell middens, for example, have demonstrated the rich and diverse resources used by the Mi'kmag, as well as the variety of technologies employed (Smith and Wintemberg 1973). Eel was a traditional and important food source for many of the Mi'kmag people throughout the year. Indeed, Kat was among the peoples' favourite catches (Whitehead 1991:9-10). The area surrounding the Paq'tnkek community (Antigonish) has been identified as an important fishing ground for eel and other fish. The Mi'kmaq have been known to camp in the Antigonish area during the winter season. For example during 1799-1800, a petition was sent to Sir John Wentworth requesting assistance for they were experiencing a harsh winter. The fish and game were mentioned as being very scarce and that "the eels were hard to get at due to the thickness of the ice and uncommon depth of snow." The common belief at this time was that most of the Mi'kmag would be winter camping in this area so that when relief was sent eight months later, "No supplies were sent to Guysborough, Pictou, or Merigomish in the hopes that the Indians would winter in and around Antigonish" (Julien n.d.: 5-6).

One legend, 'the Storm Maker' (a mighty bird), tells of the plentiful supply of eels and other fish in the sea which were the main source of food for the Mi'kmaq people during the "hungry moons of winter". This was the case until the arrival of the Storm Maker. The Storm Maker caused all the fish and eels to be swept out to sea by the wind created through the flapping of its wings. A Mi'kmaq tricked the Storm Maker and bound up its wings to prevent it from driving the fish and eels out to sea. But, a scum covered the water so that the people were unable to see the eels and fish. At this point, the Storm Maker's wings were unbound by the Mi'kmaq after giving the promise not to cause such strong winds. The Storm Maker did create enough wind, though, to blow away the scum and allow the people to once again see the eels and fish (Robertson 1969:46-48). Here the

importance of eel to the Mi'kmaq is emphasised, particularly as a critical food during the winter.

Kat is also considered to have many spiritual qualities as evident in its use as a ceremonial offering and in its place in various legends. It's physical characteristics also enable the Mi'kmaq people to use it medicinally for various types of ailments. For instance, eel skins (*kadaagel*) are reported to have been used as braces and bandages, "...juniper balsam and eel skin make a good poultice for sprains (Lacey 1977: 39). The Mi'kmaq people were very resourceful and tended to use all portions of the eel. For example, the skins were also used as hair strings. In one legend, *Sakklo'pi'k*, the hair strings are described as made of "...painted eel skin, porcupine quills and sinews [which] are combined...into a new being – the hair ornament" (Holmes-Whitehead 1988: 11). Here eel skin in combination with other elements is attributed with transformative properties. Various other portions of eel were also used as bait for trapping.

Kat was involved as an important spiritual and ceremonial offering, i.e., eel skins and heads, to the grandfathers (called feeding of Grandfather - *Apuknajit*) to give thanks to the spirits for allowing the people to survive through the most difficult time of year (Marshall 1997: 62). Kat was also left as a gift for Glooscap, along with tobacco, by hunters. These gifts were offered to bring good fortune during the hunt (Joe 1988). The use of Kat is also associated with taboos. The fact that a taboo exists clearly indicates Kat possesses spiritual qualities and must be treated with respect. For instance, it was believed that: "If they had roasted an Eel, they also believed that this would prevent them from catching one [at] another time" (Denys 1672).

The Mi'kmag word for sharing is utkunajik. The Mi'kmag people are a very sharing people. Mi'kmag as a rule do not hoard food, and usually when they have more than the family needs they share with others in the community. With the Mi'kmag, "The sun shares its warmth; the trees share their wind; and the Mi'kmag share in the same spirit, be it in their material goods or in their life experiences" (Johnson E. et. al 1991:27) In another illustration of sharing Johnson's essay also mentions the process a Mi'kmag person undergoes when travelling abroad to resettle. Within Mi'kmag communities welcoming involves offering of a place to stay until the individual is able to obtain their own place. This is done in the spirit of sharing and not, for instance, as a method of repayment for favours owed. Salite is also mentioned as a method of sharing, and it still is practised to the present day. Sharing of *Kat*, as one from among a variety of resources important for food, medicinal and ceremonial uses, has been a notable feature of Mi'kmag life and relationships. This brief review highlights the deep and rich connection between the Mi'kmag and Kat. This relationship was and remains important to the Mi'kmag culture and way of life.

Pag'tnkek First Nation Profile

The Paq'tnkek First Nation is a small native community located approximately 24 kilometers east of Antigonish, in Northeastern Nova Scotia. As of July 2002, this band consisted of 482 registered status Indians as defined by the Indian Act. Of these, 312 are living on reserve. Of the remaining 170, 155 live off reserve and 15 live on another reserve. The community's population also includes a number of non-status persons.

Presently, there are 99 dwellings in the community. At the time of our survey, 98 of the 99 dwellings in the community were occupied. Our survey collected information from 93 of these 98 households and reflect an on reserve population of 315 individuals. This population consists mainly of the band's registered members but also includes band members from other reserves, non-status Indians, and non-natives who currently reside on the reserve.

The Paq'tnkek First Nation was registered as a reserve in 1820 with 1000 acres set aside for the Mi'kmaq Indians of the Afton and Pomquet areas (Reserve General Register, Pomquet and Afton #23). The reserve land outlined included 880 acres in the Pomquet area and 120 acres at the confluence of 'the river', i.e., Indian Gardens or the Pomquet River. This area was originally placed in trust for the benefit of the Indians to Rev. E. Burke. Although this area was not officially a reserve until 1820, it was referred to as a reserve in the early 1800s. The amount of reserve land has been seriously reduced due to encroachment and squatting activities. Today, the Paq'tnkek First Nation reserves/settlements consist of Pomquet and Afton No. 23 with 191.5 hectares, Summerside No. 38 with 43.4 hectares, and Franklin Manor No. 22 (part) with 212.5 hectares (Reserve General Register).

Paq'tnkek in Mi'kmaq means "by the bay." This meaning emphasises the importance of the bay and its resources to the Mi'kmaq people of this region. The Antigonish and Pomquet harbours along with the associated watershed and the land surrounding this area have been the source of many types of food for all Mi'kmaq throughout the Maritime provinces. Traditionally, the Mi'kmaq were a nomadic tribe travelling throughout the Maritimes in order to sustain their way of life. Often they would move according to seasons and were careful to treat Mother Nature with respect for they wanted to ensure the bountiful resources for future generations. It is a common belief among the Mi'kmaq people that if nature was treated without respect, then there would be no resources left for future generations to draw upon.

Of course, the importance of Mi'kmaq relations with *Kat* carries forward to the present day. This is especially true since *Kat* remains a key potential resource within Mi'kmaq land and for Mi'kmaq First Nations' communities. Certainly, relations with and use of *Kat* will continue as important to the Mi'kmaq culture and way of life. The household-focused study reported on here is intended, in part, to deepen the understanding of the Paq'tnkek's use of and practices concerning *Kat*.

A General Social Profile of Pag'tnkek Households

Three hundred and fifteen persons were specified as residing within the ninety-three households that participated in the study, an average of 3.4 persons per household. The actual household sizes are distributed across a range that varies from nineteen containing a single resident to three housing ten persons. An almost equal number of males (49.8%) and females (50.2%) comprise the total household population.

The age structure of the total household population reveals important qualities of the 'on reserve' Paq'tnkek community. The average age of household residents is twenty-five. But, this average does not reflect the predominance of children and adolescents in the population. The median age of the population is twenty years, meaning that 50% or one of every two of the residents are 20 years of age or younger and 50% are 20 or older. The youthful profile of the 'on reserve' population is illustrated in Figure 1. Fully 30% of the residents are 11 years of age or younger, while most of the middle-aged and all of the seniors fall within the oldest 10% of the population, i.e., those who are 51 years of age and older. It is important and interesting to note that the population growth trend evident here runs in a direction which is entirely consistent with patterns in other First Nations, and is opposite to the 'ageing' trend in Canada's non-native population. Finally, the depth and pervasiveness of the youthful age profile reveals that this characteristic of the Paq'tnkek and other First Nations populations will persist into the foreseeable future.

The population dynamics indicate that the Paq'ntnkek community will soon be facing serious challenges when it comes to meeting their needs in the areas of education, health care, housing, social programs, economic development and employment. It is highly unlikely that these problems will be solved or alleviated by out-migration since the current trend is for people to stay in the community rather than move elsewhere in order to obtain better services or better employment. Currently only those with professional skills are likely to move away from the community in order to find work. Should the community fail to meet the challenges posed by a rapidly increasing population they are likely to see a worsening of social conditions within the community, reduced opportunities for young people to learn traditional skills and less interest by young people in carrying on traditional Mi'kmaq practices. It will not be just the Mi'kmaq connection to *Kat* that will be lost, but a whole range of cultural practices related to the physical environment and to traditions of sharing the resources of that environment.

The youthfulness of the community also creates certain opportunities for positive change, however. If the majority of young people living in the community were to acquire a serious interest in traditional cultural knowledge, they would, through numbers alone, become a powerful force towards the strengthening and maintenance of traditional knowledge and practices, which could include a revival of Mi'kmaq language use as well as other forms of knowledge such as

those associated with *Kat*. The community thus stands at a crossroads. On the one hand there exists a very real possibility of an accelerating loss of traditional knowledge and values, but on the other the possibility of cultural revitalisation. A deeper understanding of Mi'kmaq relations with *Kat* could assist the goal of revitalisation through developing greater awareness within the community of a process of cultural loss that is underway but which is not irreversible.

Figure 1: Population Distribution by Year Born

Year Born

Just over 67% of the population documented in the survey was born in Antigonish-Paq'tnkek. The remainder reported being born in other Nova Scotian settings (17.7%) or outside of Nova Scotia (14.5%). People born in Nova Scotian settings other than Antigonish-Paq'tnkek have been drawn from many places scattered throughout the province, with the largest portion of the birthplaces being located in Northeastern Nova Scotia settings such as Eskasoni, Sydney, and Pictou Landing. With respect to those born outside of Nova Scotia, over one in every two originated in the United States, particularly from Boston and Maine. Notably, age is strongly related with birthplace. This is evident from the information presented in Table 1. Almost 85% of those 12 years of age and younger were born in Antigonish-Paq'tnkek, while almost one in every two of those born in 1969 or earlier (those 33 years of age or older) originated from

another place in Nova Scotia (22.5%) or from outside of Nova Scotia (24.5%). Put another way, the younger a resident is the more likely she or he was born in Antigonish-Paq'tnkek.

Table 1: Place Born Categories by Age Categories

Place Born

Age Categories

	33 and Older	Between 13 and 32	12 and Younger
	(N=102)	(N=103)	(N=106)
	%	%	%
Antigonish-Paq'tnkek	52.9	65.0	84.9
Other Places in Nova Scotia	22.5	20.4	10.4
Places Located Outside of Nova Scotia	24.5	14.6	4.7

Note: the distribution presented in this table is highly significant, achieving a chi square test result of .000.

This pattern suggests that considerable inter-regional and intra- provincial migration and shifting of residence has characterised the earlier life of many among the older members of the 'on reserve' Paq'tnkek community. This pattern changes among the youngest. The vast majority of those younger than 33 have been born and raised in Paq'tnkek. This is especially the case for the youngest third of the residents, those 11 years and younger. Being born and raised in one location is important to the development among people of a sense of place and of attachments to place. These qualities are also critical to the development among people of a sense of community. Certainly the birth and residential patterns evident among the youngest 50% of the community's population suggest considerable potentials exist for the strengthening of community and community attachments. Eel fishing, eel distribution among family and community

members, and the use of eel for food as well as for other important purposes are an example of one set of practices that have had a significant place within Mi'kmaq life and culture. Exploring and understanding the Mi'kmaq relationship with eel is one way wherein knowledge of community and identity as a people will be affirmed. Such processes are as critical to realising the social, cultural, political and economic potentials of the population and residence patterns noted, as they are to successfully meeting the challenges of livelihood, employment, and

The Paq'tnkek Mi'kmaq and Fishing American Eel

Eighty persons, 26.1% of the Paq'tnkek 'on reserve' community, report that they either currently fish or, in the past, have fished for American Eel. Of these, 53 are men (66.2%) and 27 are women (33.8%). While predominantly a male activity, this information shows the considerable involvement and experience that women have with eel fishing. Table 2 profiles involvement in eel fishing for both men and women across five age categories. Overall, this information shows that Paq'tnkek participation in eel fishing has declined notably over the last thirty years, and that women's involvement has declined much more dramatically than male participation. For example, just under 40% and almost 81% of the women and men, respectively, aged 42 and older report fishing or having fish for eel. Only 22.6% of the men and 15.2% of the women between 15 and 26 years of age are described as ever having fished eel, while only 3 males among all of those who are 14 years old or younger have ever fished eel.

These results are further reflected in the responses to the question: "When did you last fish for eel?". Almost twenty-two percent of the men, but not one woman, reported fishing for eel in the last year. In contrast, almost seventy-eight percent of the women who reported fishing eel say that the last time was more than 10 years ago. This is the case for just over 35 percent of the men. In fact, only two women noted that they had fished for eel within the last five years. Indeed, women's participation in eel fishing has declined so precipitously that any local tradition of this within the community is at risk of being lost as eel fishing becomes recast as an almost exclusively male activity.

Table 2: Participation in Eel Fishing by Age and Gender

Age Categories	Gender

	Male	Female
	(N=53)	(N=27)
	%	%
42 Years to Oldest	80.6	39.3

27 to 41 Years	55.2	32.4
15 to 26 Years	22.6	15.2
8 to 14 Years	9.7	0.0
Youngest to 7 Years	0.0	0.0

As Figure 2 demonstrates, men are much more likely than women to fish eel during both the fall-winter and spring-summer seasons. Indeed, just over one in every two women fished eel only during the winter season, and just under 15% went eeling in both seasons. In contrast, 56% of the men report fishing in both seasons, with 22% noting participation in spring-summer and another 22% identifying fall-winter as the only time of year when they fish or fished. It will be interesting to learn the reasons for these notable gender differences.

Notably, several eel harvesters among those interviewed noted specific environmental conditions associated with spring-summer fishing. For example, one person remarked that there were "...lots of eels full moon in June and July. On the lowest tide there were lots of eels." Another noted that with the full moon in June eels come near the shore. As a topic, winter fishing for eels attracted but a few initial comments, mostly regarding start-up following the formation of a more or less stable minimum thickness of ice.

To some extent, the seasons in which people fish eel reflect preferences for the qualities of the eel caught. Many have noted that winter caught eel are more sought after than summer eels. Winter eels are considered better for eating, with several describing summer eels as 'too strong'. For instance, one person stated that: "...winter eels taste good, better than summer eels because the water is too warm in the summer." Another noted that summer eels are so strong that elders with heart conditions should not eat them. While these sorts of distinctions are clearly drawn by experienced persons, a considerable number of younger persons stated that they really didn't know the difference between winter and summer caught eels. This is likely a consequence of their more limited experience fishing eel and learning about eel from elders and experienced eelers.

Female

Figure 2: Percent of Men and Women Fishing by Time of the Year

Time of Year When Fishing

The interview asked about the gears used to fish eel. Almost ninety-five percent of all those with experience fishing noted that they used spears of various sorts. Some specified that, during the winter fishery, metal spears were used, while, during the summer, preference was for wooden spears, often home-made. Almost 16% mentioned that they had used nets on occasion, while much smaller numbers of participants in this study noted that they had used hooked lines, pots and polls. Certainly, the spear has remained the fishing gear of choice, reflecting a Mi'kmaq cultural practice which goes back into the mists of time. This is supported by the archaeological evidence noting common finds of harpoon and fish spear technologies in shell middens throughout Nova Scotia, but especially in the Northeast region along the Gulf of St. Lawrence and Northumberland Strait shores.

As might be anticipated, it is important to understand why the Mi'kmaq fish eel and the importance of eel within Mi'kmaq life and culture. One of the intentions of this study is to deepen understandings of these qualities. As a start to this process, participants who reported fishing eel were asked: 'What do/did you do with the eel you've caught?' Figure 3 shows that most men and women noted that they fished eel for food. But, many more men than women (66.7% as compared with 14.8%) also specified that they gave away eel caught. This is a practice noted more commonly by older males. The practice of giving eel away is likely an expression of the 'traditional' male role of contributing to the provision of food,

especially meat and fish, within the natal and extended family, as well as within the broader community. This sharing quality is similar for males whether or not they were born and raised in Antigoinish-Paq'tnkek area, meaning that the practice of giving away eel was, and perhaps still is, a common behaviour on the part of men throughout the Mi'kmaq Nation. Similarly, it is also likely that male eel fishers are expected, when possible, to distribute eel at least within their extended families.

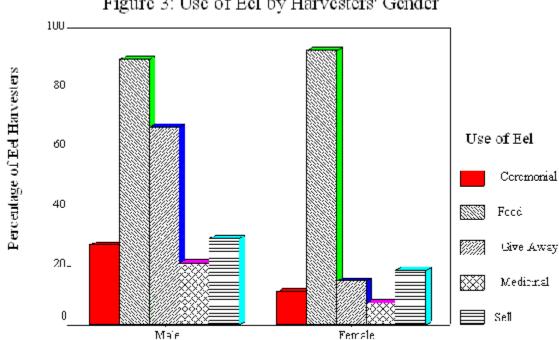


Figure 3: Use of Eel by Harvesters' Gender

Eel Harvesters' Gender

A sizeable minority of men (29.2%) and women (18.5%) also specified that they had sold at least some of the eel caught. Older eel harvesters in both gender groups are more likely to have sold eel than are those in the younger age groups. And, the likelihood of having sold eel is similar for all, regardless if born and raised in either Antigonish-Paq'tnkek or other locations. But, catching for the single purpose of selling seems rare, at least in the past. One elderly male eeler remarked that he occasionally bartered eel with non-natives for other food and necessaries. Several noted that only eels surplus to family and community needs would be sold. Often selling occurred simply because their was a need for cash, and eel was one of the few resources that Mi'kmag could harvest and sell. But, fishing eel for the purpose of selling is reported to be considered an inappropriate and disapproved of activity, particularly among elders. As one person described: "We would fish 'til we got a certain amount for family use. If a good spot was found, extra eels caught were given away to elders. Grandfather said never sell eels, give them away."

Finally, a notable minority stated that at least some of the eel caught were used for ceremonial and medicinal purposes, with men being more likely than women to specify these sorts of usages. Again, men and women in the oldest age categories are much more likely than younger persons to note ceremonial and medicinal uses of eel they caught. This information suggests that important dimensions of 'traditional' Mi'kmaq ceremonial and medicinal use of eel, as well the knowledge of these uses, are at risk of being lost within the next generation or 30 years.

A critical quality of human practices concerns the character of the social relationships that are found to reside at the heart of how people become involved in and learn about activities. This is particularly important with respect to the transmission of knowledge about food harvesting activities such as eel fishing. In order to explore key attributes of these social processes, participants in the study were asked questions about who they first went fishing eel with as well as who, in their judgement, taught them the most about eel fishing. They were also asked whether any other members of their family fished eel, and to indicate specifically the social relationship of each person to them, for example, brother, husband, daughter, mother's father, mother's brother, father's father and so on.

To begin with, over ninety-two percent of the women and three of every four of the men with eel fishing experience noted that they have or had other family members who fish or fished eel. A wide variety of kin were specified as fishing or having fished eel. Among the most prominent are fathers, fathers' fathers, brothers, mothers brothers, sons, and husbands. Further, every Antigonish-Paq'tnkek born and raised woman reported having at least one other family member who fished or fishes eel. Over four in every five of the men born and raised in this locality also noted family connections. This attribute is only slightly greater for Antigonish-Paq'tnkek people than it is for those born and raised either outside of Nova Scotia or in some other region of Nova Scotia. This information portrays the fact that eel fishing is situated and, likely rooted, within birth and marriage family relationships and connections.

This key social quality is further underlined by responses to queries requesting that the participants identify the person or persons, by social relationship, with whom they first went eel fishing as well as the person or persons who taught them the most about eel fishing. The responses to these questions are presented in Table 3. Certainly, the rootedness of eel fishing in family relationships is made fully evident through these results. For instance, fully 96.3% of the women and almost two of every three of the men noted that they first went fishing with immediate family relations. In both instances, first fishing with fathers is the predominant family connection, specifically being the situation described by almost 56% of the women and just over 43% of the men. But other important initial relationships are also evident, in part as unique to either men or women. For instance, over 11% of the men noted that they 1st fished eel with their mothers' brothers. The unique qualities of this relationship as the only maternally referenced kin connection noted denotes it as a culturally signified special

relationship among the Mi'kmaq, particularly but perhaps not exclusively between Sisters' Sons and Mothers' Brothers. The wife-husband relation is also notable in women's descriptions of the person or persons with whom they first went fishing. Over one in five women specify that they first went eeling with their husbands. Among men, but not among women, social relations understood as friendships are specified frequently as important to first eel fishing experiences. Almost 30% of the male respondents, but only one female (3.7% of all), noted that they first went fishing with a friend or friends, the males second most mentioned social relationship following that of father.

Table 3: Important Eel Fishing Social Relationships by Gender

Social Eel Fishing Experiences
Relationship 1st Fished Eel With Taught Most About Eeling

	Male	Female	Male	Female
	(N=44)	(N=27)	(N=42)	(N=26)
	%	%	%	%
Fathers	43.2	55.6	38.1	61.5
Mothers	0.0	7.4	0.0	3.8
Fathers' Fathers	4.5	7.4	4.8	3.8
Mothers' Brothers	11.4	3.7	9.5	0.0
Husbands	0.0	22.2	0.0	7.7
Other Relatives	6.8	0.0	16.7	11.5
Friends	29.5	3.7	16.7	11.3
Self	4.5	0.0	14.3	0.0

When thinking about the person or persons from whom the most has been learned about eeling, both male and female respondents specify a pattern of social relations that is similar, but not identical to, the pattern evident for 1st fishing experience. That is, kin relations are identified as most important to learning about eel fishing by the majority of men and women., with fathers being specified commonly as most important to learning. But, it is interesting to note

some of the differences between social relations associated with 1st eeling experiences and those linked with learning about eel fishing. Unlike women, there are a notable minority of men who report that they taught themselves. Also, a number of men note that their formative learning experiences were with brothers and other relatives. While some women report 1st experiences with husbands, apparently for most these experiences are not considered formative when it comes to learning about eel fishing. Other kin as well as friends are noted more commonly than husbands as important to learning.

These qualities in the social relationships associated with 1st experiences and learning have also been examined in relation to the age of the respondents as well as the locality within which they were born and raised. With one notable exception, the patterns described above are similar among the women and men who fish or have fished eel irrespective of their age and the localities within which they were born and raised. The exception to this is the prevalence of mothers' brothers as key in 1st fishing experiences and learning about eel fishing. This social relation is much more evident within the oldest age category than it is among all of the younger age categories. Keeping in mind that the actual numbers of cases are modest, this distribution suggests that Sisters' Sons/Daughters connections with Mothers' Brothers as a culturally denoted special relationship may be fading in meaning and importance among younger Mi'kmaq and within Mi'kmag families. Reasons for this change cannot be explored with the information at hand, although it is most likely important to examine this change's causes, character and possible consequences for Mi'kmag social relations, social support processes, and culture.

The Locations Where Paq'tnkek Resident Mi'kmaq Fish Eel

When asked where they have fished eel, most of those who either fish or fished eel reported that they eeled in many locations. Much of the Pag'tnkek residents' eel fishing has been concentrated within Northeastern Nova Scotia, and particularly around the Antigonish and Pomquet Harbours estuaries as well as along the rivers that empty into them. But, many Pag'tnkek residents have also fished for eel, at one time or another, in settings situated in every one of the Maritime Provinces as well as in the State of Maine. Almost sixty-nine percent of all eeling locations mentioned are situated either around the Antigonish and Pomquet estuaries or along the rivers that feed into them. Among the most commonly noted sites within this area are Williams Point (19 mentions), Summerside (28 mentions), Antigonish Harbour (16 mentions), Pomquet Harbour (14 mentions), South River (6 mentions), and Heatherton (7 mentions). In addition, several mentions are made for fishing eel at Harbour Centre, Southside Harbour, Bayfield, and Barney's River. The next largest concentration (14.9%) of eeling sites mentioned are located on Cape Breton Island. On Cape Breton, Pag'tnkek residents report fishing eel in

locations such as Eskasoni, the Bras D'or Lakes, Troy, and Nyanza. The remaining fifteen percent or so of locations mentioned are spread all over

mainland Nova Scotia (e.g., Pictou Landing, Guysborough, and the Stewiake River), New Brunswick (e.g. Big Cove), Prince Edward Island (e.g. Summerside area), and even in Maine. Certainly, the eeling concentrated in and around the Antigonish and Pomquet estuaries is most meaningful for the majority of Paq'tnkek resident eelers as is indicated by the fact that the vast majority mention these sites first.

As might be expected, those born and raised in locations other than Antigonish-Paq'tnkek are slightly more likely to fish or have fished eel in two or more locations, and to have fished outside of the Antigonish-Pag'tnkek area. But, the eel fishers' gender and age appear much more indicative of whether they have fished for eel in a variety of locations. Just over 73% of the women reported that they fished in only one location, and for the vast majority that location is situated within the Antigonish-Pag'tnkek region. Only one woman indicated that she had fished eel in three or more sites. In contrast, almost 34% of the men specified three or more locations as sites where they fish or have fished eel. Again, most of these are locations situated around or associated with the Antigonish and Pomquet Harbours estuaries, although many have also fished for eel at one time or another in other Nova Scotian and Maritime locations. Among the Mi'kmag, the Antigonish-Pomquet estuaries and watersheds were apparently considered to be especially abundant with eel. Several of those interviewed mentioned that many from other communities in Cape Breton and throughout mainland Nova Scotia used to come to fish eel with the Paq'tnkek Mi'kmaq, particularly at places such as William's Point and Harbour Centre around Antigonish Harbour and at several locations around Pomquet Harbour.

When examined from the perspective of the eel fisher's age, the more aged the fisher the more likely she or he has fished in two or more locations. For instance, in the age group 33 and older almost 65% report fishing in two locations. Further, just over 35% in this age group specify fishing in three or more locations. In contrast, almost 73% of the 13 to 32 age group report fishing for eel in only one location. This distribution suggests that Paq'tnkek resident eel fishing, over recent years, has become concentrated in fewer and fewer sites than was once the case. The reported experiences of the older age group suggest that it was once common for eel fishing to be distributed across a wide variety of locations, particularly within the Antigonish-Pag'tnkek region. This apparent change may reflect little more than a response to the decline in eel populations, with a consequence of concentrating eel in known preferred habitats. Additionally, this pattern may reflect a change in Pag'tnkek resident harvesting practices and relations with eel, especially with younger persons participating less frequently in the eel fishery and concentrating their fishing in a far narrower range of sites than was once the case.

The Paq'tnkek Mi'kmaq and Use of American Eel

It has already been noted that, while eel is fished primarily for food, it is consumed in a variety of settings as well as used for a variety of purposes. It is important to document and to understand some of the core attributes associated with Mi'kmaq consumption and use of American Eel, especially since these qualities are likely to enrich appreciation of the place of eel within Mi'kmaq culture and among the Mi'kmaq people.

In general, just over fifty-four percent of all household members surveyed (169 of 312 persons) reported having eaten eel, with men (56.1%) being slightly more likely to eat eel than women (52.2%). Of course, the numbers of those reporting having eaten eel, contrasted with the much smaller number specified as fishing or having fished eel demonstrates that eel has been distributed widely, by those that catch it, within the Paq'tnkek community. Holding age constant, these patterns apply across the community irrespective of whether the participants in this study were born and raised in the Antigonish-Paq'tnkek locality or elsewhere.

A different and important pattern emerges when examining eel consumption with respect to the age of participating household members. This is displayed in Figure 4. The vast majority of men and women 27 years of age and older report having eaten eel. While substantial numbers in the 14 to 26 years of age range also are identified as having eaten eel, the information presented in Figure 4 shows that a remarkable decline through this age range when compared with the eel consumption experiences of those falling in the older age categories. Given that a small portion of those falling into the youngest age category are reported as eating eel, it is unlikely that the decline in eel consumption for the 14 to 26 year age group can be attributed mainly to factors such as Mi'kmaq cultural prohibitions or restraints on feeding eel to children, adolescents and young adults.

It is more likely that factors such as decline in access to eel as well as changes in food preferences are at work among the constant and dramatic decline in the experiences of the youngest age groups with eating eel. What was once a commonly shared and experienced food is becoming an increasingly rare experience.

Gender

Gender

Gender

Gender

Gender

Gender

Gender

Augusta Sto 14

Gender

Female

Figure 4: % Who Eat or Have Eaten Eel By Age and

Age Categories

This is made even more evident by the responses to the question: "When Have You eaten Eel [Last]?". Twenty percent of the men and almost twenty-five percent of the women reported last eating eel more than 10 years ago. Indeed, only 31% of the men and 25% of the women reported eating eel within the last year. But, within this group those 42 years of age and older report eating eel more commonly than is the case for any other age group. That is, a little over 46% of those 42 years of age and older indicate that they ate eel in the last year, as contrasted with 18% of those in all other age categories combined. These differences suggest that both access and preference are involved, with older persons expressing a preference that has its roots in a time when eel was consumed by the vast majority of Mi'kmaq.

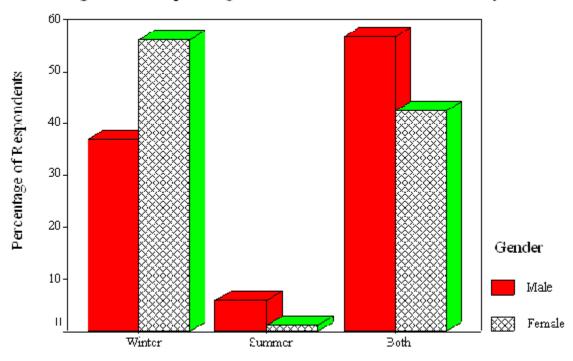


Figure 5: % Expressing Seasonal Preference for Food Eel by Gender

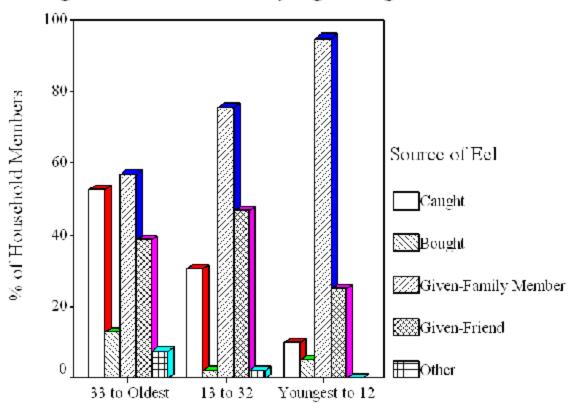
Preferred Season in Which Eel is Caught for Food

Figure 5 profiles female and male preferences respecting the season during which eel is caught for food.

While many men and women do express a food preference for eel caught in both seasons, a notable number express a preference for only winter-caught eel. Very few state a preference for only summer caught eels. Women express a particular preference for winter caught eels, while men are slightly less discriminating. Summer-caught eels are said by many to be 'too strong'. A few persons even noted during the interviews that the strength of summer eels was such that the elderly, particularly those with heart conditions, should be discouraged from eating them.

Those who eat or haven eaten eel report that they obtain eel from a variety of sources. Figure 6 summarises this information with respect to three age categories of household residents. One of the most interesting attributes of the patterns evident here

Figure 6: Source of Eel by Age Categories



Age Categories

is simply that many, indeed most, receive eel from family members and friends. Those who fish are shown to supply eel to both their immediate families as well as to the families of other kin and friends within the Pag'tnkek community, and no doubt elsewhere. The patterns evident here reflect and emphasise the continuing practice among the Mi'kmag of redistributing and sharing resources, where and when possible. Of course, this quality of family, kin, friendship, and community relationships represents an important social foundation from which to assure wide distribution of benefits arising from resource entitlements, such as those assured by the Marshall decision. But, a shadow of sorts may be falling over this traditional Mi'kmag cultural practice. As noted earlier, younger aged eel harvesters are much less likely than older eelers to give away portions of their catches. Hopefully, this is only a temporary consequence of the dramatic declines in eel resource and catches. Once eel return in sufficient numbers, the sharing and redistribution cultural practices evident in Figure 6 are likely to flower fully once again, particularly given the predominance and embeddedness of the 'sharing value' within Mi'kmag culture, social life and social relationships.

Figure 7: End Uses of Eel by Age Groups 120 100 % of Household Members Uses of Eel 30 Food 60 Self for Cash Cive Away 40 Ceremonial Use 20 Medicinal Use Other Uses 33 to Oldest 13 to 32 Your.gest to 12 Age Categories

Figure 7 describes the various uses made of eel by those reporting that they eat or have eaten eel. As might be expected, the predominant use of eel is for food. This holds true across all age groups, and does not vary meaningfully with respect either to gender or to the locality within which persons are born and raised. But there are other, possibly important, attributes respecting the use of eel evident in this information. First of all, a notable number of persons report that they gave away eel which they had, in the first instance, been given. Surely this is another instance of the sharing and redistributive cultural ethic. Again, this behaviour is reported much more commonly among the older persons who eat or have eaten eel than it is among the younger age groups.

Another quality evident in Figure 7 is the use of eel in ceremonial settings. Of particular importance here is the important place of eel among 'traditional foods' offered during Mi'kmaq and Paq'tnkek feasts as well as during the meals and community gathering associated with funerals. It needs to be mentioned that these uses are also a key aspect of uses classified by several respondents in the 'Other Uses' category where 'events' such as funerals were specifically cited.

Notably, a sizeable minority also reported that they use or have used eel for medicinal purposes. This is yet another attribute that is much more commonly associated with older household members than it is with many falling into the younger age groups. Several noted that eel oil is good for ear infections. One person specified that: "...the eel is hung for three days to drain the oil." Eel oil

was also mentioned as effective for chest colds and congestion. The treatment here is to rub the oil directly on to the chest. Another specified that the broth from eel stew is an effective treatment for the flu. Eel skins were also mentioned as effective as wraps for sprained ankles and wrists, and, when soaked in eel oil, as a treatment for painful legs and arthritis. Given that this sort of knowledge is almost exclusively associated with elders, there is a risk that knowledge about these uses of eel may be lost over the next generation, particularly since few among the younger adults seem aware of the ways in which eel has been used medicinally. By the way, all of these qualities do not vary meaningfully with regard to the household member's gender or place of origin, meaning that they are qualities likely found expressed throughout the Mi'kmaq Nation as a feature of Mi'kmaq culture and social life.

Where Eel is Eaten

Own Home

Grandparent's Home

Parent's homes

Welatives' homes

Other Settings

33 to Oldest

13 to 32

Youngest to 12

Figure 8: Where Eel is Eaten by Age Categories

Age Categories

The diversity of the social contexts wherein the Paq'tnkek people of all ages eat or have eaten eel is evident in Figure 8. As would be expected, the majority of all ages report eating eel in their own homes. But, this is not the case for a vast majority of the household members. Many eat or have eaten eel in settings other

than and in addition to their own homes. Notably, those falling into the youngest age category are almost as likely to eat or have eaten eel in their grandparents' homes as in their own homes, or homes identified as their parents' homes. Further, substantial numbers of people falling into the older age groups report eating eel in many social settings, ranging from their parents' homes, through the homes of other relatives, to friends' homes. Once again, these patterns do not meaningfully vary with respect to household member's gender or place of origin, suggesting they are likely evident throughout the Mi'kmaq Nation.

The patterns presented in Figure 8 do highlight a potential concern. The fact that most falling within the youngest age group do not report eating eel in the homes of other relatives and friends raises the possibility that the experience and meaning of eating eel in these sorts of social settings is becoming inaccessible for many. Hopefully this is associated with declines in the availability of eel, and will be adjusted should eel become more numerous and available.

These attributes suggest that offering eel to guests and eating eel together carries important cultural meanings, especially among older members of the Paq'tnkek community. As found within most human settings, foods offered to and shared with kin, friends and visitors are 'special'. These categories of food usually are attributed with qualities such as welcoming, bounty, healthfulness, and richness. They also emphasise values such as sharing and the social meaning of eating these foods together. Eel certainly appears to occupy such a place among the Mi'kmaq and within Mi'kmaq culture. These cultural associations with accessing and eating eel are further emphasised by the fact that feasts, community events, religious events, and life cycle events such as funerals were most frequently mentioned as the 'Other' Settings' within which eel has been and is eaten. Indeed, many noted that feast days and funerals are among the only settings wherein they now access and eat eel.

Summary and Conclusions

This study shows that, for the Mi'kmaq people, Paq'tnkek-Antigonish has been an important site for sustained and intensive participation in eel fishing. The findings reported here clearly show that there is a deep cultural and lifeways connection between the Paq'tnkek Mi'kmaq and *Kat*. This connection extends from harvesting *Kat*, mainly for food, through extensive sharing of eel within and among the community's families, to the use of *Kat* for ceremonial and medicinal purposes. The results also show that the relationship of the Mi'kmaq with *Kat* extends through time to the present day.

But, the research results also show that the Mi'kmaq connections with *Kat* are eroding to the extent that soon most will be at risk of being lost forever. This is evident in the dramatic decline of participation in eel fishing and use among all of the younger adult age groups. These changes are particularly notable among women and adolescents. Certainly the evidence suggests that there are conditions developing which will interrupt the transmission of knowledge and practices

from the older to the younger generations. Moreover, special knowledge and practices arising from the relations of Mi'kmaq women with *Kat* fishing, preparation, cooking, and medicinal and ceremonial usages may soon be lost if the trends evident continue into the near future.

In part, these changes are associated with the institutional practices and social policies that continue to frame and contain Mi'kmag lives as well as with the factors that are directly affecting Mi'kmag access to and use of *Kat*. For example, the evidence presented here reveals that the people are not nearly as mobile as they once were. This is seen in the relationship between peoples' ages and place born. While a little over one in every two of those 33 years of age and older were born and raised in Antigonish-Pag'tnkek, almost four in every five of those 12 years of age and younger have been born and raised in Antigonish-Pag'tnkek. This is an outcome of the programs implemented by Department of Indian Affairs for the purpose of consolidating and maintaining control of those living on reserves. That is, in order for a registered band member to access all of the funds he or she is entitled to requires that they live on a reserve. Social programs only assists those living on reserve, and priority for access to employment opportunities, educational services, and housing is given to those living on reserve. These policies of consolidation and control place limits on the capacity of Mi'kmaq individuals and families to reside in various settings. This, in turn, creates barriers to access to experiences with and knowledge about cultural practices such as fishing and sharing eel, as well as the ceremonial and medicinal use of Kat.

The results concerning the relationship of age with fishing eel shows a dramatic decline in harvesting experiences among younger persons and women. For instance, slightly more than 4 of every 5 men and almost 2 of every 5 women over the age of 41 reported fishing for eel at some point in their lives. This is the case for less than 1 in every 4 men and fewer than 1 in every 6 women between 15 and 22 years of age. Such a decline in participation rates and experiences suggests that fewer persons are accessing and using Mi'kmaq knowledge respecting eel harvesting. Should this trend continue, there is a very real risk that much, if not all of this knowledge, will disappear. Many factors contribute to such a cultural loss. Among these are a decline in the population of elders in proportion to those of a younger age, environmental factors that have impacted on the availability of natural resources the Mi'kmaq people have traditionally used, and, in particular, the recent decline in eel populations.

Another example of changed cultural practices and potential cultural loss is evident in information respecting the sharing of eel. Many more people report eating eel then report fishing eel. This reveals that eel has been extensively redistributed and shared by those fishing it within and between families. But, the evidence reported here also shows that younger adults are much less likely to have eaten eel than older persons. Further, when eating eel, younger persons are much more likely to have eaten it in their parents and grandparents homes rather than in their own homes. Additionally, in recent times eating eel for many people

is an experience almost exclusively associated with feasts, funerals and other ceremonial occasions. Certainly these trends suggest that eel is no longer as commonly shared within and between families as it once was, particularly as a distinctive quality of the Mi'kmaq diet.

The evident decline in sharing, in part, may reflect little more than the decline in Mi'kmag access to eel and participation in eel fishing. This, in turn, is related to the conditions that increasingly have limited Mi'kmag access to eel fishing grounds. Physical access has declined simply as a consequence of the creation of the reserve system. Many of the lands once plentiful with game and fish were now occupied and cleared by the newcomers, thus reducing or eliminating physical access to critical fishing grounds. For instance, Indian Gardens (Summerside) once served as a vital site in the Mi'kmaq food harvesting. Through relocation of the people from this area to the main reserve, the Mi'kmag were no longer as able to access the harbour or river. Further, the Antigonish Harbour area was once of such great importance to the Mi'kmag people that winter camps were set up there in order to access fish. Consolidation of people on the reserves, combined with the creation and enforcement of private property rights as land was allocated to and exchanged among settlers, has placed physical and legal restrictions on the Mi'kmag's ability to sustain participation in the eel fishery. The cultural meaning of eel fishing for the Mi'kmaq, as well as the place of eel in the Mi'kmaq diet, are compromised considerably by these developments.

These factors have played an essential role in altering the customary practices of the Mi'kmaq people respecting the harvesting and use of *Kat*. As one eel fish harvester notes:

At one time, people who owned fishing scows (flat bottom boats made of boards) would leave their boats on shore, often along with other tools such as fishing spears, oars, eel spears, etc. It was no problem for other individuals to come along and use the boat to get a feed of eels. Whoever went fishing eels or other types of fishing often shared their catch with the family who owned the boat. Yet, as time went by this practice seemed to cease when respect for another one's gear began to diminish. This made people less likely to leave their boats for other people to use and share. Therefore, accessibility to a boat and other tools was reduced. As a result, fishing practices within the community have declined (K. Prosper, pers. comm. 2002).

Disrespect of other peoples' property within the value of sharing and, no doubt as a result, increased vandalism are examples of changes within the Paq'tnkek and surrounding communities. Certainly this sort of change has further eroded the Mi'kmaq peoples' relations with and use of *Kat*.

It is also likely that a number of human use and environmental factors have combined to impact on the eel population within the Antigonish and Pomquet estuaries and their watersheds. Many developments contribute to these impacts. Among these are factors such as chemical contamination of the inland water habitat and oceanic waters, over-fishing, sarguusum seaweed harvesting, introduction of foreign species, loss of habitat due to deforestation, agricultural practices, and obstructions of waterways from dams and causeways, restocking practices of rivers and lakes with fish species that are valued by recreational fishers, introducing recreational fishery species as competitors with eel for food within the ecosystem, technological advancements in fishing power and efficiencies, and the decline of eel grass. Exact knowledge of cause-effect relationships and dynamics requires specific studies that have yet to be completed. Irrespective, there is no question that the access to and use of eel among the Mi'kmaq people has been impacted upon negatively. There is also little doubt, given the trends apparent in the information reported here, that Mi'kmaq livelihood and cultural connections with and knowledge of *Kat* are at risk of being lost should these conditions continue into the near future.

The decline in eel fishing, consumption and ceremonial use of *Kat* may also be linked to the eel fishery commercialisation, particularly with regard to the eel spear fishery. As shown in the SRSF Fact Sheet #6, during the 1990s the Nova Scotia eel spear fishery reached an all time peak in eel catches. Yet, at the same time, the commercial eel spear fisheries in other Maritime provinces were declining. But, the price for eel continued to rise. As a result, eel fishers from other Maritime Provinces were drawn to the Nova Scotia grounds in order to participate in the lucrative eel fishery. Among these was Donald Marshall Jr. who decided to practice his Mi'kmaq treaty right to fish commercially according to the Treaties of 1760-1761. In response, DFO challenged Donald Marshall's treaty right by charging him for selling eels without a license. At the same time, the eel spear fishery in Nova Soctia was at its peak with prices continuing to rise over the next four years, peaking at an all time high in 1997. Eel catches and prices collapsed in late 1998 and early 1999, the same year in which the Supreme Court of Canada affirmed the Mi'kmaq right to fish commercially (*Regina v. Marshall*).

These conditions left the Paq'tnkek Mi'kmaq and surrounding communities with limited access to eel for food. Meetings between the Acadian and Paq'tnkek Mi'kmaq communities were held with DFO to stress the importance of the eel food fishery. As a result, a specific location in the Pomquet Harbour area in the Summerside area was reserved specifically for the eel food fishery. Additionally, all parties agreed to mandate the use of only lanterns and the prohibition of generators. Commercial fishing, in effect, was banned from the area. But, the damage to eel populations was already done. These developments have likely accelerated the changes underway within the Mi'kmaq respecting the selling, use and sharing of eels.

In our opinion, the changes underway are such that it is now critical to document thoroughly Mi'kmaq knowledge of *Kat*, as well as Mi'kmaq practices associated with harvesting, preparing, cooking and using eel for ceremonial and medicinal purposes. This will be the purpose of the second phase of the current study. In

this research the intention is to interview the members of the Paq'tnkek Mikmaq community identified as knowing a lot about catching, preparing and using eel. This work will help preserve the cultural connection between the Paq'tnkek Mi'kmaq and *Kat*. It will also systematically and thoroughly document the connection of the Mi'kmaq with eel in a manner that will assist in and be of use to the peoples' entitlements, governance and management of resources such as eel. Finally, it is important to document our elders knowledge and experiences so that future generations can readily access it as part of the work necessary to keep Mi'kmaq culture and traditions alive. The recent decline in the number of elders in the Paq'tnkek community underlines the importance of moving forward as soon as possible with this research.

This study has documented Mi'kmaq practices and relations with *Kat*. It has also identified important changes. Through presenting the findings to the Paq'tnkek community, we hope to increase awareness of the importance of these practices and connections, as well as awareness concerning the changes underway. For us, one hope is that the information and discussion contained in this report will help in motivating the community to begin addressing the issues raised as an aspect of the need for the people to prepare for a future in which they will have more opportunity to affect and to direct change.

<u>Appendix 1</u>

Research Design and Procedure

This phase of the research was designed with a focus on thoroughly documenting basic attributes of household-centred experiences in Paq'tnkek with fishing, preparing and cooking eel. Additionally, this phase has been intended to solicit recommendations from the people of Paq'tnkek respecting the persons thought of as knowing a lot about catching, preparing and cooking eel.

In order to accomplish these objectives, the SRSF team in partnership with the Paq'tnkek Fish and Wildlife Society (PFWS) developed a questionnaire loosely modelled on a household-centred, census approach to gathering information. This approach was adopted after deciding that survey techniques employing either telephone or self-report methods would likely be unsuccessful in realising the level of participation desired. The survey instrument and consent form were designed during a series of workshops held by SRSF and PFWS staff members. (see Appendix 1).

The Paq'tnkek Fish and Wildlife Society staff composed a letter introducing the Society and the study to the Paq'tnkek community (see Appendix 1). A list of each household was composed and numbered by PFWS staff. The letter was then hand-delivered to every household as well as to the Chief and Band Council. The letter was accompanied by copies of the two SRSF Fact Sheets developed by the Paq'tnkek Fish and Wildlife Society staff, 'Kat (American Eel)Life History' (Fact Sheet #6) and 'The Mi'kmaq Relationship with Kat (American Eel)' (Fact Sheet

#7). In addition to the Society's staff, two additional Mi'kmaq interviewers were contracted to assist in the completion of the study. Both of these interviewers were selected, in part, because of their capability in the Mi'kmaq language and as a result of their previous interviewing experiences. They were introduced and trained with respect to the overall purpose of this study as well as the particular attributes of the questionnaire, the consent form protocol, and information recording procedures. For instance, they were required to learn anthropological acronyms for recording kinship relationships as well as the stipulation that only household member initials were to be recorded on the form for the purpose of protecting confidentiality and anonymity.

Each household's number was pre-recorded on the questionnaires. The only copy of the household master list and corresponding numbers is securely stored within the PFWS office. This list, as the only document linking specific households with completed questionnaires, will be destroyed upon completion of the study. All record-keeping respecting matters such as tracking completion rates and assuring completion and storage of consent forms and questionnaires has been managed by PFWS staff. The data base for the information gathered through this study was designed in the Statistical Package for the Social Sciences (SPSS) by SRSF staff. Additionally, SRSF staff entered most of the information from the questionnaires as these were completed by PFWS interviewers. Any extra information recorded by the interviewers on the questionnaire forms was identified by household number and included in a Microsoft Word document titled 'PFWS Eel Study – Phase I, Comments Recorded on Interview Forms'. Complete copies of both the SPSS data file and Word document are housed in the PFWS and SRSF offices. All of the attributes described here concerning the measures assuring confidentiality, management of records, storage of forms, and sharing of information conform with the research ethics provisions specified by the Mi'kmag Research Ethics Committee in their approval of the study.



Paq'tnkek Fish and Wildlife Society RR #1 Afton Antigonish County, NS B0H 1A0



Dear Community Member:

We (Kerry Prosper and Mary Jane Paulette) have been working with St. F.X. on a project studying the Mi'kmaq relationship with the eel. The eel was chosen as the topic of research because it has played a major role in our lives. Traditionally the eel was used by the Mi'kmaq people as a food source, a ceremonial object, for medicinal purposes, and so on. Just recently, the eel was the topic of concern in the Marshall Decision (1999) which acknowledged the Mi'kmaq people's right to fish commercially.

Yet, today only a few of us can recall memories involving the eel. What caused the dwindling of these types of memories? Perhaps it is a result of the declining eel population in our nearby waters (Pomquet and Antigonish harbours). These waters were once plentiful with the eel and Mi'kmaq people from other communities would travel to our local area to fish them. The fact only a few of us can recall any memories involving the eel tells us our way of life with the eel is now endangered. This issue requires immediate attention to try to find a way to preserve our memories concerning our relationship with the eel.

We feel the best way to obtain a deeper understanding of this relationship is to gather the traditional knowledge of our own people. We are now preparing for the collection of this valuable information and plan to conduct a survey in our community in the near future.

This information will help preserve our language, history and memories of our people for future generations. Posters, pamphlets, and other types of educational materials will be produced to promote an awareness of our people's cultural connection to the eel.

If you wish to further explore our research you can visit the following website: www.stfx.ca/research/srsf/200561.htm We have also attached a copy of our fact sheets: *Kat* (The American Eel) Life History and The Mi'kmaq Relationship With *Kat*.

If you have any questions or want to learn more, please feel free to contact us. We can be reached at the Afton Band Office at 386-2955 or 386-2781.

Sincerely,

Kerry Prosper Mary Jane Paulette Community Research Coordinator Research Assistant



Paq'tnkek Fish and Wildlife Society RR #1 Afton Antigonish County, NS B0H 1A0 Phone: (902) 386-2955

Fax: (902) 386-2043



Afton Indian Band Council

R.R. #1 Afton

Ant. Co., NS

ВоН 1Ао

April 23, 2002

RE: Paq'tnkek Fish and Wildlife Society Eel Project

Dear Chief and Council:

We (Kerry Prosper and Mary Jane Paulette) have been working with St. F.X. on a project studying the Mi'kmaq relationship to eel. The eel was chosen as the topic of research because it has played a major role in our lives. Traditionally the eel was used by the Mi'kmaq people as a food source, a ceremonial object, for medicinal purposes, and so on. Just recently, the eel was the topic of concern in the Marshall Decision (1999) which acknowledged the Mi'kmaq people's right to fish commercially.

Yet, today only a few of us can recall memories involving the eel. What caused the dwindling of these types of memories? Perhaps it is a result of the declining eel population in our nearby waters (Pomquet and Antigonish harbours). These waters were once plentiful with the eel and Mi'kmaq people from other communities would travel to our local area to fish them. The fact only a few of us can recall any memories involving the eel tells us our way of life with the eel is now endangered. This issue requires immediate attention to try to find a way to preserve our memories concerning our relationship with the eel.

We feel the best way to obtain a deeper understanding of this relationship is to gather the traditional knowledge of our own people. We are now preparing for the collection of this valuable information by conducting a survey of our own community in the near future.

This information will help preserve our language, history and memories of our people for future generations. Posters, pamphlets, and other types of educational materials will be produced to promote an awareness of our people's cultural connection to the eel.

This past week we have distributed an informational package to each household in the Afton community containing various facsheets published by both the SRSF and the Paq'tnkek Fish and Wildlife Society.

If you wish to further explore our research you can visit the following website: http://www.stfx.ca/research/srsf/Fact%2oSheets/FSToC.htm Attached you will find copies of our fact sheets entitled: *Kat* (The American Eel) Life History and The Mi'kmaq Relationship With *Kat* (American Eel). Also included is the factsheet Highlights of the Marshall Decision and a copy of the permission letter we received from the Mi'kmaq Ethics Committee regarding our research plans.

If you have any questions or want to learn more, please feel free to contact us. We can be reached at the Afton Band Office at 386-2955 or 386-2781.

Sincerely,

Kerry Prosper Community Research Coordinator Mary Jane Paulette Research Assistant

Paq'tnkek Fish and Wildlife Society

Eel Survey

Consent Form

The Paq'tnkek Fish and Wildlife Society has been working in collaboration with the St. Francis Xavier University on the Social Research for Sustainable Fisheries (S.R.S.F.) for the past two years. Just recently, you received an information package which was delivered to your home. This information package contained

some of the Fact Sheets that we have developed in partnership with 'Social Research for Sustainable Fisheries' at St. Francis Xavier University. The information presented in the Fact Sheets along with the working document The Mi'kmag and the American Eel (*Kat*) was gathered from researching various historical documents, legends and our language. In addition, we have gathered ecological information on how the eel lives in our rivers and ocean waters, the impact of the commercial fishery and other environmental factors that impact on the eel's way of life. We are now at the point in our research where we would like to incorporate the knowledge of our own people. We plan to achieve this by first conducting this eel survey. This eel survey will help us gain a deeper understanding of the Mi'kmag relationship to the eel. This survey will first gather information regarding your household to enable us to utilize every member's experience and knowledge. It will also gather information regarding the eel, its role in the past, present and future of your family. Your memories as a family are very important to us. This research will enable us to document things such as how, when and where families fished eels, the methods used to cook eels, and how eel was used.

Overall, this eel survey will enable us:

to learn about the history of the eel fishery, its consumption and use among the Mi'kmaq people.

to discover Mi'kmaq social relationships (Ex. Who showed you how to fish eels?)

to identify the people thought to know the most about eels among our people.

All information gathered from this survey will be held in strict confidentiality and used within the guidelines set out by the Mi'kmaw Ethics Committee in their approval of our project. These completed surveys will be stored at the Paq'tnkek Fish and Wildlife Society office and the SRSF office at St.FX in Antigonish.

This consent form was developed to ensure the confidentiality of the person and/or person(s) agreeing to participate in our study. Signing this consent form will enable us to use your information and experiences in developing a better understanding of the relation between the Mi'kmaq and the American eel. But, none of the information supplied by any individual will be publicly associated with that person. Of course, you may choose not to answer particular questions or stop the interview at any time should you become uncomfortable.

Overall, your contribution to this survey will be greatly appreciated and will help us gain a deeper understanding of the Mi'kmaq relationship with the eel. You will receive a copy of the research report that will be developed from the study's findings. The survey is designed to take approximately 45 minutes to an hour.

Would you like to participate in our survey?
I/We
agree to participate in the Paq'tnkek Fish and Wildlife/SRSF Eel Survey and agree to allow the above mentioned society to use the information gathered, within the terms and conditions outlined, for the purposes of furthering their research concerning the eel and the Mi'kmaq people.
Date:
Participant(s) Signature(s):
I,
Interviewer's Signature:
Interviewer's Signature:
Back to Table of Contents
AMERICAN EEL MI'KMAQ LOCAL ECOLOGICAL KNOWLEDGE STUDY
Phase I – Household Study
Household #(pre-record)
Introductory Remarks

Recently a letter and some information was sent to you by the *Paq'tnkek Fish and Wildlife Society* that introduced a study that we are conducting. This study concerns gathering and preserving Mi'kmaq people's knowledge of and

experiences with the American Eel (*Kat*). Our purpose is to document the Mi'kmaq peoples use and knowledge of eel so that we can better understand traditional resource use and management practices. We also think it important to rediscover and to preserve the cultural tradition of eel harvesting and use among the Mi'kmaq.

For the past couple of years we have been working in partnership with 'Social Research for Sustainable Fisheries (SRSF)' at St. Francis Xavier University. SRSF is an alliance of community organisations and university social researchers concerned with understanding and supporting the sustainability of fishing and fishing people. As a part of this research partnership, *the Paq'tnkek Fish and Wildlife Society* has been researching eel and its relationship with the Mi'kmaq people by looking at historical records, government documents, legends and the Mi'kmaq language. It is now important to deepen our understanding through interviews with the Mi'kmaq.

The interviews will gather information about eel fishing, preparation and use. All information gathered will be held in strict confidentiality and anonymity. All information will only be used within the guidelines set out by the Mi'kmaw Ethics Committee in their approval of this research. Once this research is completed you will receive a copy of the preliminary research findings report.

Do you agree to participate in this interview?

Yes	No	(If No, please ask for reasons why not and
record the	ese in this space)	

If Yes

Introduce and Read the Consent Form. Following this request that **ALL** participating adult members of the household sign and date the Consent Form. Make sure that **two** forms are signed and dated so that a copy can be left. Once this is completed conduct the interview(s).

The interview will begin with a few basic personal questions....

1.	2. Would	3.	4.	5.	6.	7•
Household Member Number	you Please tell	Gender 1.Male	Social Relations of	Where were you	Where were you	Have you (Has This Person)
	me, in What	2.Female	Household Members	Born?	Raised?	Ever Fished
	VASP			(nooond	Irogond	FAIS

	were You Born?	(use the kin list to record relations)	place name in space below)	place name(s) in space below)	1.Yes 2.No (If No, Go To Q. 18)
1					
2					
3					

8.	9.	10.	11.
(If Yes) Where Do or Did you (they) Fish Eel?	When Did You Last Fish for Eel?	At What Time of the Year Did You Fish for Eel?	How Have You Fished For Eel? (list techniques
(write in the names of places in the space	1.In the last Year?	1.Summer 2.Winter	in the space below)
provided)	Last 5 Years	3.Both	
	a In tha		

Last 10 Years	
4.More Than 10 Years Ago	

Household Member	12.	13.	14.
Number	What Do/Did You Do With	Who Did you	Who Would
	the Eel You've Caught?	First Go Eel	You Say
	Do/Did you	Fishing With?	Showed You the Most
	1.Take it Home to Eat?	(Note: record whether father,	About Fishing Eel?
	2.Sell It?	brothers, father's father	(Note: record
	3.Give it Away?	and so on)	relationship, not name, as
	4.Use it For		in father,
	Ceremonies?		father's brother,
	5.Use it For Medicinal		father's
	Purposes?		father and so on)
	6.Use Eel for Purposes		
	Other Than Food (e.g., skins)		
	(Nata: uasand the numbers		

	for all uses)	
1		
2		
3		
4		

15.	16.	17.
What Other Members of Your Family Have Fished or Now Fish for Eel	Where was you father raised?	Where was your mother raised?
(Note: record relationship as in father, father's brother, father's father and so on)		

Household Member Number	Have you Ever Eaten Eel? 1.Yes 2.No (If No, Go To Q. 27)	19. (If Yes) When Have You Eaten Eel? 1.In the Last Year? 2.In the Last 5 Years? 3.In the Last 10 Years? 4.More Than 10 Years Ago?	When During the Year Did or Do You Usually Eat Eel? During the 1.Winter 2.Spring 3.Summer 4.Fall 5.Year Around 6.Whenever Available	What Eels Do You Prefer to Eat? Do you Prefer 1.Winter Caught Eels? 2.Summer Caught Eels? 3.Both	When You Get to
1					

2		
23. What Do/Did You Usually Do With the Eels you Received? Did you	24. Where Do/Did You Usually Eat Eel? Do You Eat Eel	
1.Take Them Home to Eat?2.Sell Them?	1.In Your Own Home? 2.In Grandparents' Homes?	
3.Give Them Away?4.Use Them For Ceremonies?5.Use Them For Medicinal	3.In Parent's Home? 4.In the homes of Relatives? 5.In the Homes of Friends?	
Purposes? 6.Use Them For Purposes Other Than Food (e.g. skins)	6.Other (specify)	
(Note: record the number for all uses)		

Household 25. 26. 27. 28.	
---------------------------	--

Number	Who Usually Cleaned the Eel?	Who Usually Cooked the Eel?	Other than yourself, who would you say knows a lot about Eel Fishing among the Mi'kmaq? (record their name and place of residence)	Is there anyone else in addition to this person who you thinks knows a lot about Eel Fishing? (record their name and place of residence)
1				
2				
3				
4				

Household Member	29.	31.	32.
Number	How would you say you have come to know the 1 st person mentioned?	Other than yourself, who among the Mi'kmaq would you say knows a lot about	Is there anyone else among the Mi'kmaq other than this person who you think knows a lot about preparing and cooking eels?

	2.a friend 3.fished with 4.fishing reputation 5.fishing success 6.reputation as a community leader 7.other (Note: may select more than one and ask for specifics when selecting 'other'.)	cooking Eels? (record their name and residence)	(record their name and residence)
1			

33.
How would you say that you have come to know of the 1st person that you have mentioned?

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Appendix II

Many of those interviewed specifically noted many deceased people as knowing a lot about fishing, preparing and cooking *Kat*. This reflects the fact that Mi'kmaq keep in living memory those who have passed on. The knowledge of and regard for these people lives. In the Mi'kmaq language the importance and memory of the people who have passed on is indicated in the use of a new assigned name. An extra suffix *o'q* is added to the deceased person's first name, as the absentative case. This indicates that the person named is no longer with us – at least in the worldly conscious sense. Another key characteristic is that following the death of person, a *salite* is held. A meal comes first. This meal is given by the deceased in honour of the people present. The second part of the ceremony is a thanksgiving during which the person who has just passed away is thanked for sharing his or her life with us. This is also the beginning of the healing process.

This is also a key cultural aspect of the Mi'kmaq oral tradition. Mi'kmaq oral tradition has managed to preserve the memories of our ancestors. This is evident in the very existence of our various rituals, legends and myths, ceremonies, and practices. For example, in the story *Papkootparout*, "there is a bridge across the gap created by physical death...Relationships between parents and children, or between husband and wife, are changed by death, interrupted perhaps, but not ended. This is the circle of life – the living have a connection with heir dead ancestors, and at the same time they are the ancestors of those who have not yet come into the world." For more information see Leavitt, 1995 and Upton, 1979.

Out of respect, we include in this appendix a list of all the deceased mentioned in honour of our ancestors. To all those who have passed before us, *Wela'lin*.

Frank Johnson

Andrew Johnson

Thomas Julian

Charlie Johnson

Joseph Johnson

Jasper Prosper

Andrew Bernard

Maurice Lewis

Steve Simon

Kate Paulette

Sadie Marshall

Charles Bernard

Mark Stephen

Bernie Peters Jr.

Tina Simon

Theresa Julian

(Note: Please forgive any omissions of names that may have been mentioned during the interviews. Such would be the unintended result of a recording error or misunderstanding)

Appendix III

Several of those interviewed generously provided suggestions and recipes for preparing and cooking *Kat*.

"to store eels for summer use salt and hay...puts eels in a bucket, layering eels with salt and hay...use a flat rock to cover them."

Gut the eels and hang them overnight to drain the oil.

Then, cut the eel into pieces.

Eel stew is best for the flu.

When making eel stew keep adding water. Can keep broth for syrup.

The eels are cut up into pieces, then [add – mix in] flour, onion powder, salt, pepper, cook [bake] at 350 until golden brown.

Marshall Family Recipe

Weskiteka'tasikewey (Mi'kmaq Eel Pie)

3-4 medium sized eels (3 inches in diameter)

2 cups of flour

1/3 cup of corn meal

2 tsp. baking powder

½ tsp salt

2/3 cup lard

½ cup buttermilk

Tie a string around the head of the eel and fasten to a nail. Cut around skin and pull it back, peeling it off the entire length of the body. Remove the head. Cut the fish open and take the guts out, making sure that the main artery that lies along the belly of the eel is removed. Clean and wash the eel thoroughly. Cut slits on one side of the eel about 1/8 inch deep from one end of the fish to the other. Cut the eel into 3 inch pieces. Par boil eel in hot water for about 10 minutes. Set oven at 400 degrees. Put eel in a cast iron frying pan. Pour in water to the depth of the eel, all but covering the eel. (Baking method of the Mi'kmaq) Put eel in the oven and bake until you hear a sizzling sound or in Mi'kmaq....... This means that the eels are evenly browned on both sides. Take them out of the oven.

In a large bowl, combine flour, corn meal, baking powder, and salt. Cut in the lard using a pastry cutter or knife until it resembles courses crumbs. Stir in the milk a little bit at a time, using a fork. Transfer to a lightly floured surface and kneed gently. Spread out and knead with palms of hand or rolling pin until the pastry is about ½ inch thick. Make the pie fit the size of the pan. You don't have to go over the edges. Lay the pastry over the eels and cut two vent holes in the centre. Dab milk on top of the pie. put in the oven and cook for about 20-30 minutes, or until the crust browns. It has to be watched very carefully. You don't want the water to dry up. If you hear a sizzling sound add a little bit of water. However, don't add more than ¼ cup at a time.

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Endnotes

'Social Research for Sustainable Fisheries is an alliance of fisheries community organizations and university-seated social researchers. The core community partners in the alliance are: the Gulf Nova Scotia Bonafide Fishermen's Association, the Guysborough County Inshore Fishermen's Association, and the Paq'tnkek Fish and Wildlife Society. The alliance is funded through a grant won from the Social Sciences and Humanities Research Council of Canada Community-University Research Alliance programme (#833-99-1012). Further information about the alliance's purpose, work and governance can be accessed through its' website at: www.stfx.ca/research/srsf.

³Franklin Manor is currently co-owned with the Pictou Landing First Nation with distribution is based on population. Presently, Afton owns approximately 48% of this land which is located 32 km SE of Amherst, Nova Scotia.

² These statistics are provided by the Department of Indian and Northern Affairs Canada website under their First Nations communities profiles (http://esd.inac.gc.ca/fnprofiles).