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Résumé de l'article

Pendant des générations, des familles de cultivateurs de la rivière Margaree du Sud-Ouest ont pêché le gaspareau, poisson également appelé alewife. Le gaspareau de la rivière Margaree est vendu comme appât à homard, ou à des acheteurs qui l'exportent aux Caraïbes, principalement en Haïti. Dans cet article, les récits, en particulier la tradition orale et les anecdotes, représentent un moyen privilégié de comprendre les processus naturels, technologiques, réglementaires et commerciaux impliqués dans la pêche au gaspareau sur la rivière Margaree du Sud-Ouest. Le piège à gaspareaux utilisé sur la rivière Margaree présente un intérêt particulier, car il a été inventé localement par un pêcheur mi'kmaq ; il est à présent utilisé à la fois par les pêcheurs au gaspareau autochtones et non autochtones de l'île du Cap Breton. Les sources utilisées pour cette étude consistent surtout en entrevues réalisées avec des personnes impliquées directement dans la pêche et, à un degré moindre, en discussions avec des fonctionnaires du gouvernement et la communauté étendue de la rivière Margaree. L'étude conclut que la pêche au gaspareau sur la Margaree a son importance, non seulement en tant que revenu d'appoint, mais aussi en tant que forme de cohésion sociale d'une communauté particulière.

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ELIZABETH BEATON

Gaspereau Fishing on the Southwest Margaree: Gathering at the River

Résumé

Pendant des générations, des familles de cultivateurs de la rivière Margaree du Sud-Ouest ont pêché le gaspareau, poisson également appelé alewife. Le gaspareau de la rivière Margaree est vendu comme appât à homard, ou à des acheteurs qui l'exportent aux Caraïbes, principalement en Haïti. Dans cet article, les récits, en particulier la tradition orale et les anecdotes, représentent un moyen privilégié de comprendre les processus naturels, technologiques, réglementaires et commerciaux impliqués dans la pêche au gaspareau sur la rivière Margaree du Sud-Ouest. Le piège à gaspareaux utilisé sur la rivière Margaree présente un intérêt particulier, car il a été inventé localement par un pêcheur mi'kmag; il est à présent utilisé à la fois par les pêcheurs au gaspareau autochtones et non autochtones de l'île du Cap Breton. Les sources utilisées pour cette étude consistent surtout en entrevues réalisées avec des personnes impliquées directement dans la pêche et, à un degré moindre, en discussions avec des fonctionnaires du gouvernement et la communauté étendue de la rivière Margaree. L'étude conclut que la pêche au gaspareau sur la Margaree a son importance, non seulement en tant que revenu d'appoint, mais aussi en tant que forme de cohésion sociale d'une communauté particulière.

Abstract

For generations, farming families on the Southwest Margaree River in Cape Breton have harvested gaspereau, the fish also known as alewife. The Margaree gaspereau is sold for lobster bait, or to buyers who export it to the Caribbean, mainly Haiti. In this article, narratives form the basis of understanding the natural, technological, regulatory and commercial processes involved in the gaspereau fishery on the Southwest Margaree River, in particular through storytelling and anecdotes. The gaspereau trap used on the Margaree is of particular interest because it was developed on the Margaree River by a Mi'kmaq fisher; it is now used by both native and non-native gaspereau fishers on Cape Breton Island. The sources for this study consist mainly of interviews with those directly involved in the fishery, and, to a lesser extent, discussions with government officials and the wider Margaree community. The result is a realization that the Margaree gaspereau fishery is important, not only as an income supplement, but also as a form of social cohesion in a particular community.

In the spring of the year, along the Southwest Margaree River in Inverness County, Cape Breton Island, red sheds of various sizes can be seen against the new green of the trees and fields. Close to the sheds are small wharves with large cages and the elements of a pulley system. Through May and June, families along the river supplement their farming livelihoods by harvesting and processing gaspereau. During that two-month period, people gather on the riverbank to watch the clouds of fish with their shimmering scales come up the river on their way to spawn. Usually, the entire family is present for the first

run, the exciting climax of all the preparations. Neighbours are also often there to witness the first and subsequent runs. The same applies to lobster fishermen waiting to buy gaspereau for bait; they might bring along one or two children just to watch the process.

The gaspereau fishery offers a chance for the entire family not only to work but to enjoy camaraderie with family members, friends, and neighbours. It has also been a time to enjoy the river. Meal times become picnics on the bank. If the weather is warm enough, the children might be swimming under the watchful eye of older

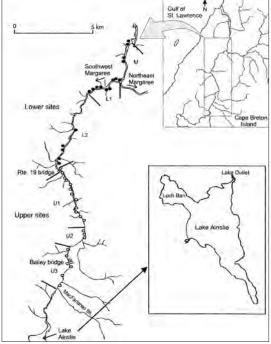
Fig. 1 (top)
Map of Cape Breton;
Margaree River and Lake
Ainslie in box.

Fig. 2 (middle)

Map of Margaree River showing gaspereau trap sites on upper and lower river. (Chaput, LeBlanc, and Crawford, 2001: 24).

Fig. 3 (bottom)
Peters family members
and friends on dock.
Photo courtesy of Peters
family.







siblings. Taking pictures of gaspereau fishing was very common, probably because it was one of few times when entire families, usually busy with disparate farm chores, might get together for an occasion. Stories and opinions are shared about prices, past and current fishing and processing methods, and memorable floods. The shared experiences are integral to the gaspereau run on the Southwest Margaree River.

The waterway is part of a set of two rivers the Southwest Margaree River and the Northeast Margaree River-which come together at Margaree Forks and go on to Margaree Harbour. For many years, the gaspereau fishery has been important to the people of the Margaree area, and indeed to many estuarine waterway communities in the Maritime provinces. In the past, fishers and onlookers of all ages gathered at night around a fire, gossiping or courting, drinking and eating, comparing stories as the silvery fish were being scooped up in large dip nets. Today's work in the gaspereau fishery, being regulated, does not take place at night, and the technology of harvesting is markedly different, but the family and social aspects of the fishery still remain.

Gaspereau¹ is plentiful in estuarine areas all along the Atlantic Coast of North America, from Newfoundland to Florida, travelling up streams from the ocean to spawn in quiet bodies of water, usually lakes (Chaput, LeBlanc, and Crawford 2001: 7, 8, 13). They feed and overwinter along the Atlantic Coast in the southern Gulf of St. Lawrence. The gaspereau that come up the Southwest Margaree River in the spring travel upstream about twenty kilometres, where they lay their eggs in Loch Ban in the southeast corner of Lake Ainslie. Laying and fertilizing the eggs takes about twenty days. The parent fish then return to the ocean after a couple of weeks. Juvenile fish stay in the spawning area for as long as three to four months before returning to the streams and spawning areas from which they came. The small fish then travel back to the ocean, where they stay for three to four years. From that time, they return every year to spawn (Crawford and Tully 1989, cited in Chaput, LeBlanc, and Crawford 2001: 3; also DFO 2007, 2010, 2012).

In the 1950s there were only about fifteen families fishing gaspereau on the river. That number increased to about eighty families in the 1970s. In 2009, there were again fifteen.

The fishery, and its spin-off economic effect, is presently worth up to \$1 million a year to the Margaree area.

Gaspereau fishing is a significant financial supplement to the income for farming families living on the Margaree River (Beaton 2009; DeVries and McNab-DeVries 1983). The original primary commercial use for the gaspereau was as bait in lobster fishing. It has also been an important local food source because it is easily pickled and can last for up to six months in that state, and, despite its boniness, it is considered to be a tasty fish. Children often collected a few fish directly from the river.

I can remember my mom would say 'run down to the river and get me some gaspereaux for supper' and she would give me the bucket and I'd go down and ... I'd take my boots off and I'd go in the river and ... fill up the bucket. (Older community member quoted by Bobby Peters, personal communication, May 9, 2009)

Fresh and pickled gaspereau were also sold throughout the rural areas by fish peddlers as recently as the 1960s. Currently, Margaree gaspereau is important as an export commodity, mainly to Haiti.

Despite the fishery's local and international commercial significance, there was little government attention paid to it until the 1970s. At that time, the Department of Fisheries and Oceans (DFO) and the Canadian Food Inspection Agency (CFIA) began regulating the fishery, and the Nova Scotia Department of Fisheries also became more involved. New harvesting and marketing methods, and declining stocks, have resulted in increased scientific interest in resource management. Now government regulations permeate practically every activity related to the gaspereau fishery, although they coincide, for the most part, with the fishing traditions on the river (DFO 2007; Maritime Provinces Fishery Regulations 1993).

Although the regulated gaspereau fishing season on the Margaree River is from May 1 to June 30, the actual optimum time for harvest is determined by other factors. The beginning of the gaspereau run is a sign of spring, but in Cape Breton "spring" is notoriously variable; the run could occur at any time over a two-month

period. In the past, the most favourable start date was around Victoria Day; today, the season may be almost over by that time. Certain natural occurrences are taken as indication of spring and the advent of the gaspereau run. Fishing families on the Margaree expect the gaspereau run when the swallows arrive and the seagulls come for easy pickings, or they look for the blooming of the "shadbush"2 and "mouse ears" on the alders—the furry beginnings of alder leaves. These events indicate a rise in the temperature of the river, resulting in the beginning of the run. In recent years, the gaspereau run as a precursor of spring has been mildly romanticized by nature lovers in the Maritimes, as evidenced in articles in Saltscapes, an Atlantic Canadian food and culture magazine (Deichmann 2005; Bancroft 2008; Jewell 2011).

The gaspereau run as "event" has been recognized for generations in Cape Breton. In 1892, the Cape Breton weekly Gaelic newspaper Mac-Talla announced the gaspero in its "News of the Week" section, along with items of fishing interest around Cape Breton Island: Tha'n i iasgach gle mhath aig Gabarus. Tha e air a radh gu bheil acarsaid beo le rionnach. Tha'n a gaspero le phailt aig Margaree (The fishing [angling] is very good at Gabarus. There are stories that the harbor is live with mackerel. The gaspereau are plentiful at Margaree) (MacKinnon 1892). On the Demariscotta River in Maine, the gaspereau (alewife) run has also been an "occasion." In the small town of Demariscotta, an alewife festival was held in the 1950s to celebrate the run and the community's participation in the fishery. The festival lasted for several days and included a beauty contest, an alewife dinner, and music in a big tent. The Demariscotta fishery closed down in 1968, but the video Closing the Circle has recorded the oral history of the fishery there. Unlike the Margaree situation, the Demariscotta fishery was a large commercial undertaking, employing dozens of people in differentiated roles—the men to harvest the alewife, the women to process the fish, and the children to run errands and even sell surplus fish at roadside stands (Richards 2005).

The family unit has conducted the entire operation of the gaspereau fishery on the Southwest Margaree River for generations, and they continue to do so. Men, women, and older children undertake all tasks related to harvesting,

Fig. 4 Stewart and Mary Gillis carry a crate of gaspereau. Photo courtesy of Gillis family.



processing, and packing the gaspereau for sale. Traditionally, much of the farm work and care of smaller children has been left to the women:

Well, my mother's role basically was looking after ... there [were] eighteen of us in the family. So I can remember going to the river with her. She was probably bringing meals down. I don't actually remember [her] fishing or packing, right. But she had her hands full. I remember her shearing the sheep, and washing the wool in the river. And ... things like that. (Stewart Gillis, personal communication, July 21, 2009)

The family and its values of work and awareness of the environment are central to the gaspereau fishery. But the fishing families' interaction with the Margaree and wider community makes the gaspereau fishery a further shared experience. This article uses a variety of sources to explore the environmental, commercial, technological, and social importance of various aspects of the fishery. However, oral evidence, in the form of personal-experience narratives as well as anecdotes, is the core of this study. The narratives serve as a collective that tells of the work involved in the fishery and its wider economic implications, builds an awareness of the river and its surroundings, and illustrates how the fishery is a part of the material culture of the Margaree community.

Narrative and Material Culture

The narratives surrounding the Margaree gaspereau fishery link the past and present of families and the community. Oral evidence establishes the cultural framework of the fishery, referencing

physical artifacts, activities, memories, and current attitudes within the Margaree community, as well as aspects of the fishery, like harvesting, processing, selling, and regulations. They also confirm awareness of family histories and the surrounding social and natural environments. While the narratives help to sustain long-standing community knowledge, they also demonstrate the existence of a very modern approach to the fishery.

This study of the Margaree gaspereau fishery shares the qualitative approach of two folkloristic studies which demonstrate processes of work leading to the production of a physical object or other tangible result. Ronald Labelle's (1980) study L'ethnohistoire du métier de tailleur de pierre a Saint-marc-des-carrierres, cont de portneuf, Quebec depicts the work and lives of stoneworkers from Québec and Atlantic Canada. Labelle's work uses narratives which tell not only of stonecutting processes, but also the pride inherent in the stonecutters' unrecognized skills, the experiences of poverty and danger, attitudes toward religion, and respect for the talents of a particular artist. One of the main results of these oral history narratives is a strong sense of the personalities of the stonecutters.

Likewise, Carriage Making in St. John's by Richard MacKinnon makes use of narrative to show the development, pinnacle, and decline of a light industry and highly skilled trade in St. John's, Newfoundland (1988). More recently, rural sociologist Jan Douwe van der Ploeg has used narrative extensively to depict how particular farmers rely on traditional knowledge to make practical decisions, such as in managing resources to feed cattle (2003). As in these scholars' work, my study of the Margaree gaspereau fishery uses personal-experience narratives providing diverse perspectives on nature, work, and community, in addition to written accounts, comments, and graphic images.

The personal narratives in this study depict the natural and technological processes involved in the gaspereau fishery; they also dip into the families' generational history of the fishery. They were often brief and incidental, coming forth on the river bank reciting particular moments in the process of the fishery or observations of natural conditions as they might affect the fish or the operation. Other narratives were collected at the kitchen tables of the fishing families. Some narratives were gathered in response to interview questions; others were shared with family members present. They include personal reflections about particular events or the amount or type of work involved in the fishery; almost always, the telling is an enjoyable occasion. Some of the longer narratives became family collaborations, where participants finished each other's sentences, or all family members contributed to the narrative. Understandably, the narratives were similar between all of the families interviewed.

The research for this study took place over a period of years, from 2007 to 2011; it began with the study of occupational diversity for farming families on Cape Breton Island (Beaton 2009). Fieldwork on the gaspereau fishery included observation, photography, and interviews. Although there were many informal discussions with fishing families, government representatives, and others, formal (taped) interviews were carried out with six individuals or family groups at the fishing berths and at home, and follow-up queries were done in person by phone or by email. The fishers are current or retired farmers, of Dutch or Celtic ethnic background. The primary resources for this research were Bobby and Anne Peters and their family, interviewed repeatedly by the river at their trap during gaspereau seasons, and also at their kitchen table at Southwest Margaree. The frequent informal discussions with people in the Margaree community revealed a strong sense of pride and knowledge concerning the gaspereau fishery.

Others, less directly involved in the actual fishing, were contacted for information. A current buyer, based in New Brunswick, was interviewed by phone using an outline forwarded in advance. Informal discussions were held with two unidentified lobster fishermen who were buying gaspereau for bait. Government personnel involved in regulation and research were consulted in reference to government publications.

Personal-experience narratives collected by Ron Caplan and published in *Cape Breton's Magazine* were useful in building a picture of more than fifty years of gaspereau fishing on the Southwest Margaree River (Chiasson 1974: 5-9). Gerard Chiasson is also the featured gaspereau fisher who tells about the fishery in the CBC documentary *Twenty Barrels a Day* (Lackie 1968).³ The more formal personal experience accounts by John Bernard Gilpin (1867) provided 19th-century documentation of the Maine gaspereau fishery. Red Door Media productions supplied oral history about the more recent Maine fishery via the video-sharing web site YouTube (Richards 2005). Like the narratives collected for this study, the published historical sources convey a sense of community occasion and they provide detail on the processes used in the gaspereau fishery.

Choosing a "Berth"

The location of the spot on the river where the fish are collected, called the "site" or "berth," is a serious consideration. Today's sites have been well established for at least the past fifty years. Tony Cameron remembers: "Basically I believe when you go to the river and gaspereau are running and you see lots of fish, in the river at that spot, that's what makes you decide. 'Course ... fishing has come a long way since then [when I was a boy]" (personal communication, June 30, 2009). For him, deeper water at a narrow part of the river is preferred. His trap is on the outside curve of the river in a depth ranging from 3.5 metres to about 40 centimetres.

I believe fish run to the outside of the bend in the river. Maybe everybody wouldn't agree, but the bottom of the river has slow current.... When you have a site that you have good size rocks on the bottom, the fish can go right over that. You very seldom see fish in the river on a flat bottom, sandy bottom. That's usually on the inside of the turn, while the gravel and rocks are over here [on the outside of the turn]. (2009)

The geomorphology of the Margaree River has significance for the placement and maintenance of the generations of weir types. Land which had previously been riverbed, the loam-clay soil on the shore at the Cameron trap—typical of the valley lands of the Margaree area—is prone to erosion, which sometimes wipes out fishing possibilities. In these cases, the traps are moved to another spot. It is likely that two relatively recent fishing operations "below the bridge" (at Margaree Forks, see Fig. 2 map) were moved as a result of erosion. For some fishing families, the

erosion has necessitated man-made changes in the riverbank. Tony Cameron paid 25 per cent of the cost of rock work on the riverbank; the government paid the rest. "The place that I fish, had I not done some riverbank stabilization, I wouldn't have a place. The erosion was pretty bad in that area" (2009). Normally, no changes to the riverbank are permitted. "If anyone wants to put rocks on the riverbank to prevent erosion, permission must be given" (2009). There was probably little problem in obtaining permission since the changes were in the best interests of the environment.

Floods—the cause of many calamitous events on the Margaree River—have resulted in natural changes in the river and the location of the traps. Gerard Chiasson remembers the flood in the spring of 1973:

We lost the trap and we fished off the bank for 10 days. High water. Lost everything. The ice only left the lake that year the 20th of May and the 2lst we had a heavy rain and the ice leaving the lake ... it flooded and just cleaned everything completely, any trap that was on the river. And the fish struck the next day. And we had no alternative but to try and we had good fishing for 10 days. But it was murder on the arms. (1974: 7)

The sites fished by the Gillis family changed over several generations, depending on the location of the family farm on the river. Stewart Gillis's father and grandfather fished gaspereau on the river at a site on his grandfather's farm. Then Stewart's father bought a place "two farms" from his father where he established his new berth. In 1980, he and his wife, Mary, bought the farm where they live now, and have a berth at that location. He explains how it took three years to settle on that spot:

Like, I went down and ... people that used to live here ... I was talking to him and he was telling me, he said this is where they used to fish, so I set up there and ... Rivers change, right? Every year they change a little. So I ... the next spring I moved it a little and then, the following spring I moved it again. And that was the spot I'm still at.... (2009)

The land beside the current Gillis berth is very fertile and is used for hay. Their trap is in a wide part of the river with a gravel bottom: "It's about eight inches of gravel right there. Once you get through, it's mud after that. You can tell when you pull the posts out" (2009).

The Peters' berth has also changed location: "What determines a good fishing spot? So hard to tell.... This has been an amazing one for us. We used to be down the river a little bit: it was a little too close to all that rock" (A. Peters, personal communication, May 9, 2009). The current location is about 500 metres from their farmhouse, surrounded by a pasture with several wild apple trees. The riverbank is known for fiddlehead ferns. The trap is in a meandering channel where the river is about 7.6 metres wide, with a depth ranging from approximately 3 metres to 30 to 50 centimetres, depending on snow run-off, rainfall, and the time of year. In the middle of the gaspereau season, the depth is usually about 2 metres. At the site, the river has a gravel bottom.

According to regulations, once the fishing apparatus is in place, it is not permitted to be moved during that season. No one can "set up" within fifty-five metres of the next berth, nor are sites allowed on the side of the river opposite the deck and pickling area. There can be exceptions to that rule depending on "traditional" placement. Stewart Gillis tells of an exception, a neighbour whose fishing structure and gear had been established for many years on the side of the river opposite the landing and pickling location:

He always fished the opposite side of the river. Once they got it over, they left it there, right? Then they had a pulley system with a bench going back and back.... Once he got over there he probably stayed. But it worked. But earlier, and I'm going back to the 60s, they had a walkway ... right across the river. It was Jimmy and Bernie MacFarlane, they were exempt from that too, because they always fished on the opposite side. (2009)

The success of setting up a favourable situation for fishing is, of course, dependent upon the behaviour of the gaspereau. Loud sounds or vibrations make the fish move away from shore. Gaspereau prefer the deep water of the pool, where they seem to be able to avoid rushing water:

"they get in there to rest; you see them jumping [because there are so many fish in one spot]" (A. Peters). Peters observed that there should be plenty of vegetation along the riverbank by the trap: "They are really finicky fish: they like shade ... in the bright sunlight, shadows make them scatter." Gaspereau behaviour is constantly discussed: "The fish are wild this year. The water is very bright and low. And when they're running in small schools like that they are very wild.... You want ... dark water. You want a cloudy day" (Chiasson 1974: 7).

An understanding of the river and surrounding environment, as well as its effect on the gaspereau's behaviour, is essential to the placement of the berth. This awareness comes from generational example and commonly known narratives about the river and the fish. The crucial importance of the berth is underlined with the evolution of different types of weirs of differing size and complexity.

Evolving Harvesting Technology

Throughout the recorded history of the Maine and Atlantic Canada coast, we see that weirs, cast nets, gill nets, dip nets, and traps have all been used to harvest gaspereau. The 1867 description provided by Gilpin describes an early cast net used in Maine:

On every jutting point, on every isolated rock, a figure with a bag net on the end of a ten- or fifteen-foot pole, casting his net again and again, into every little pool or whirling eddy at his feet, and returning it as often filled with one, two, or more glittering fish, which with a dexterous toss he throws upon a slivery heap, tossing and flapping their lives away on the warm grass hard by. (107)

Also from Gilpin comes a romanticized depiction of an Aboriginal fisher as he uses his particular type of cast net:

He stands before us casting back-handed throws of his bag-net, with true Asiatic grace, so different from the direct Anglo-Saxon plunge of his neighbours, so resembling round hand bowling, the last Bobby dodge of the cricketer. In the days of which we speak, he stood bare head and

neck, a scarlet-seamed blue hunting frock girt about his loins by a gay girdle, holding his knife and tobacco pouch, scarlet edged leggings shewed fairly his clean curved limbs, and moccasins of his own make covered his firm foot.... He lands two or three glittering fish at our feet. (107-108)

A DFO report from 2001 states that drift and gill nets are used at the harbour mouth of New Brunswick's Saint John River, while traps are used further up-river. Weirs involving drift gill nets and dip nets are used on the Shubenacadie River. Some fishing communities have devised their own unique modes of catching gaspereau; for instance, a "square net," made of wire or twine and attached to a pole, is used only on the Gaspereau River in Southwestern Nova Scotia (DFO 2007).

Historically, the main means of catching gaspereau on the Margaree River was a "dip net," a method still used in the smaller streams. In the last sixty to seventy years this was a wire basket attached to a long pole, which was dipped into the brook and left for a few minutes to fill with fish. It was then drawn out and the fish dumped in a bag or large bucket. In narrow streams, the dip net was set in a blockage of stones and branches which would force the fish into the net.

A string-mesh version of the dip net continued to be used as part of the "sluice trap," the next phase of harvesting technology: a type of weir which came into effect in the early 20th century. The construction of the sluice trap was complex and time-consuming. Bobby Peters describes the preparatory work:

The way we used to construct the traps; all that wood. Wooden fence posts, and wooden poles.... April, we'd go to the woods for a day and cut the poles.... Start the actual construction which involved banging posts in the river—making a framework basically-which required about fifty posts all driven by hand.... That used to take four to five good days.... Later, I changed the method.... We just used three steel beams with posts at the end. And then drop them into the river. Then build a frame, plywood frame on top of that, so it's a lot less work.... But you have to get a backhoe to put it in, and take it out.... You can have the trap done in a day. (Personal communication, May 9, 2009)



Fig. 5
"Wings" to funnel the
fish into the trap. Photo
by Elizabeth Beaton.

Fig. 6 Splashing the water to move the fish into the trap. Photo by Wally Ellison.

Fig. 7
Dip net used to take fish from the sluice trap.
Photo by Wally Ellison.





The wooden posts were about 2 metres long and were held in place by long thin black spruce poles. These constituted the infrastructure used to hold the trap correctly in the river. The sluice trap itself was a wooden rectangular box with one side lining up with the river shore. The sides of the box were wooden boards on a pole frame and held in the river by posts driven into the river bottom. Depending on the width of the river and the preference of the fishers, the trap measured 3 to 4 metres in length, about 1 metre in width,

and whatever height was needed to reach from the bottom of the river to the surface, usually 1 to 1.5 metres. The trap had no bottom or top. The upstream end was closed off, and the downstream end had an opening to allow the fish to enter the trap. There was a sided deck or platform, usually slanted, from the trap to the shore. The sluice trap remained in the water for the entire season.

Leaders or "wings," made up of tree boughs held in place by poles, funnelled or deflected the gaspereau into the trap. The fishers also guided the gaspereau toward the trap by chasing them—either by walking in the water, throwing stones, or throwing metal objects held at the end of a rope. Once enough fish went into the trap, they were scooped out from the shore side of the trap with dip nets and thrown onto the deck (Figs. 5 and 6).

The sluice trap had a number of problems. Its construction was awkward and time-consuming, and emptying the trap with the dip net required backbreaking bending and lifting (Fig. 7). More importantly, the sluice trap's harvest was limited because the gaspereau were forced up against the end of the trap, along with water, necessitating frequent emptying. Even when a screen mesh was introduced to allow water flow, the laborious job of dip netting was not alleviated.

Since the late 1970s, gaspereau have been caught using a distinctive tool that has become known as the Margaree tip trap. It was not confined to the Margaree River, being also used at Prime Brook, at Gabarus and in the Mira area in the 1970s. A cod trap similar to the tip trap is used in Newfoundland (Industry Canada 1996). The Margaree version of the trap was the innovation of Stephen Googoo, a Mi'kmaq who fished on the Margaree River in the 1970s.

The tip trap, like the sluice trap, is based on the weir principle. It is a large rectangular metal cage constructed of welded iron bars and wire mesh through which water readily flows. The tip trap has a "guillotine gate" opening for the fish on the downstream end; the trap is pulled out of the water and the top tipped over by means of a pulley system, thus allowing the fish to be thrown out. As with the sluice trap, leaders or wings, sometimes called "tail ladders," are used to funnel the fish up into the trap. There is a sloped wooden deck to catch the fish as they are dumped from the trap.

Because of the improvement over the sluice trap, the Margaree gaspereau-fishing families adopted Stephen Googoo's design very quickly. They used differing sizes depending on preference and the depth of the river at a particular site. Bobby Peters' family was the first on the Margaree to use the tip trap. Bobby's brother Ron, then sixteen years old, convinced their father to copy Googoo's design.

It was in the '70s when the Indians ... introduced the steel traps that came out of the river; the whole trap comes out of the river and emptied its contents onto the deck. Whereas we used to use a scoop net to scoop them out.... We were the first trap on the river that year, I think for a couple of years. Now there's people below us, quite a few people below us. That was about thirty years ago. People would make the steel part of wood as well, and a wooden gate at each end. (B. Peters, personal communication, May 9, 2009)

Stewart Gillis also acknowledged Stephen Googoo's innovation of the tip trap. He describes the adoption of the tip trap due to its ease of use:

Yes. We started using them in ... I'm thinking probably '79. Once ... I think it was a couple of years after the Indians came. Googoo ... it was him that kind of designed it.... He fished a couple of years and then, people ... we started seeing, you know, how easy it was. (2009)

Local construction of the tip trap added to its popularity. The welding was done by some tradesperson or semi-skilled relative or neighbour. Gillis' brother, an experienced welder, put their trap together (Fig. 8). "Mine is made with piping. Two-inch piping. The reason we went with pipe is because, when the water is hitting against it, it folds up—angle iron. Less resistance." Tony Cameron said:

You get the material and you get a welder.... Usually on-site. Build a trap for you—under your specifications.... Depends on where you are.... So there's no specific [river] depth. I start out with about maybe four feet. Right now it has about fifteen inches. (2009)

The tip trap used on the Margaree became a permanent structure that is hauled up and left on

the riverbank at the end of each season. The deck is also stored on the riverbank. The wings' ladder structure is kept year to year, out of the water in the off season, but the branches are replaced. The dimensions of the tip trap and the gear related to it are subject to official scrutiny.

Well, the Fisheries have regulations on them. The top of your trap to the lowest end of your tail ladder—some people call it "wings"—you're allowed fifty feet. And the bottom of your tail ladder can't exceed half the width of the river. That's not fair for me down here to block the river off, catch all the fish. They measure it. (Cameron 2009)

During the 1980s it was observed that the gaspereau catch on the Margaree River was decreasing, possibly a result of the large catches in the tip traps. Concerned fishers on both the upper and lower sections of the river—referred to by locals as below the (Route 19) bridge and above the bridge, respectively—formed associations to work with fisheries officers. They came to an agreement to rotate the fishing days, and to allow free passage at certain times to allow the gaspereau to pass through to Lake Ainslie to spawn. The rotation sets an annual schedule for the fishers on both parts of the river, allowing equal fishing opportunity for both. The rationale for the rotation is that traps set below the bridge would prevent traps set above the bridge from gathering fish. The government took some time in responding to the fishing families' concerns.

It was six years we asked them to put regulations on the river, because the stock was

Fig. 8
Tony Cameron's tip
trap lifted on "off" day.
Photo by Elizabeth
Beaton



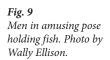
going down. So in the seventh year—there were four of us who decided, well, we're not going to fish. So we didn't fish that year. And finally DFO said okay. And they gave us this schedule.... It's complicated.... But it's great because it gives the fish a chance.... They say they only swim half the river in one day. (B. and A. Peters 2009)4

The changing of regulations came about as a result of organizing, and was a point of pride for the fishing families on both parts of the river. The associations are not currently active because the families are satisfied with the present situation.

Landing and Processing

When all the signs are present and the trap is ready to drop, the family prepares to spend much of its time at the river. A truck or tractor is brought to the trap site and set up with a pulley, or simply an attached rope, to haul the trap. Another vehicle is there to drive family members back and forth between the home and the river. Large white vats are stationed by the deck to receive the fish. Wooden rakes or shovels are ready to push the fish down the sloped deck; bags of salt are open and available for mixing with the fish as they land on the deck.

The hauling up and dumping of the first trap load is always a time of momentary excitement for the people on the riverbank. The first run marks the end of the wait for spring and for the gaspereau; it might also be an indicator of success for the ensuing season. Each successive dump is





informally timed and talked about, giving a sense of the quantity and quality of the run.

But people just come and watch. Drink beer, yeah. And they want to help, you know, so they will pick up a shovel. It's nice ... but not so nice if there's snow, or if it's raining.... Cold.... There's competition to see who catches the first fish. Oh, kind of "spying" more than anything. [Laughter] Nobody letting anybody else know how you're doing. (B. and A. Peters 2009)

As the gaspereau come up the river, someone may stand on the shore or go into the river and throw a piece of metal on a long rope to hurry the fish between the leaders into the trap. The action depends on the time of day:

If the sun is out you gotta chase them in [toward the trap]. Sometimes in the mornings you don't have to do anything. Same thing in the evening. You can see them, eh? They are feeling the difference in the water. Sun is reflection. (Gillis 2009)

A filled trap would mean that fish filled the area between the bottom of the trap to the waterline, which could vary according to the depth of the river at that point. The time it takes to fill the trap with fish is also variable. When there is "a big push," meaning a lot of fish running, the trap might be pulled up every five minutes. Most times the wait is fifteen to twenty minutes. There are two or sometimes three runs over the season: the larger gaspereau, *Alosapseudo harengo*, travel earlier, and they are followed by the *Alosa aestivalis*, the "blackback herring."

Other species are caught with the gaspereau, the most common being shad and suckers. In the past, suckers seemed to signal the end of the gaspereau run, but now they are present for the whole season.

We don't want to get suckers. We throw them back in. They are brown and so ugly. Sometimes there's tons of them.... But, yeah, we'll put them in because somebody told us they don't mind having them—not with salted fish, but with the bait. (A. Peters 2009)

Occasionally salmon and trout are caught in the trap. Even a beaver once ventured into the Peters' trap: "I almost caught a beaver. He got in the trap and he banged at the gate, and then he swam [away]" (B. Peters 2009). Anne Peters also had a trapped beaver story:

I was down at the river quite early. There wasn't anything, wasn't anything. There was this black thing. A bang at the gate. It was a beaver. Caught in the trap. And he poked his head up, looking all around, wondering, "Where was I! What was that!" You know. It was amazing. It was scary too, because he was in there for a few minutes. I thought, what should I do? I should get rid of him. I was on the tractor. It was a struggle for him. He actually flipped himself. He couldn't turn. And the fish were just all [nervous]. (2009)

Once dumped from the tip trap, the gaspereau land on a slightly slanted deck. Any gaspereau to be sold for bait are taken at this time. Lobster fishermen come by arrangement with their own receptacles to take away enough live bait for the next few days of fishing. The boniness of the gaspereau along with its cheap abundance makes it ideal bait for lobster. The gaspereau will be dead and starting to decay by the time they are "pinned" to the inside of the lobster trap, which makes them even more desirable as bait. In the past, the main buyers of gaspereau were lobster fishers, but now only a relatively small percentage is sold for this purpose. Also in the past, gaspereau were commonly consumed by the fishing families and their neighbours.

Gaspereau intended for sale are pushed from the deck with a shovel or wooden rake into a shallow bin. At this time, undesirable by-catch species are selected out. In the bin, the fish are mixed with coarse salt, poured from 23-kilogram bags.

The gaspereau are then shovelled onto a truck, or are picked up by a backhoe, and transferred to the fish building. There, the fish are shovelled into large white fibreglass vats measuring 1.2 metres by 2.4 metres by 1.2 metres, with a capacity of about 2,300 to 2,700 kilograms of fish. Fish and salt are loaded into the vats with alternating layers. Care must be taken to ensure that the fish are well salted. It is a race to get the fish salted before they begin rotting.

We do that at the river, we stir, and we mix them up there. It makes a better brine. A lot of fishermen just take a whole lot of fish and dump it in and a layer of salt, and fish and salt. And then they go in and try to mix them up with a stick in the vat.... They get heavy and you miss some; if some don't get salted, they're going to get rotten. So we do that and then they sit ... the brine is created with all their juices and the salt. And it has to be a certain strength. (A. Peters 2009)

Well, we salt them live, they come out on a big deck, which is slanted. And they go down, and most people have a system—level front-end loader on a tractor and the steps are built-in, and as they go in there, we salt them. And we take them from there to your fish building and salt them. And put them in 4x4x8 vats. And there they sit for ... 20 days before you pack them. (Cameron 2009)

A "salometre" or "pickle-tester" to measure specific gravity or liquid density might be used to test for the correct amount of salt to use in the pickling. But knowing the proper amount is more commonly a matter of experience. Inadequate salting results in soft fish, and this is checked frequently during the pickling time of three to four weeks.

Fibreglass vats were initially used in the late 1970s; before that the gaspereau were pickled in wooden vats. The Peters have been using new vats as a result of the flood of 2008, when they lost all their vats and their cooler. At that time, the fishing families applied for disaster relief and most used the financial assistance to upgrade their fishing equipment. It is now common to have fish enough for 10 vats, holding a total of up to 30,000 kilograms of pickled fish; in the past, as many as 50,000 kilograms of fish were pickled in a season.

Once pickled, the fish are packed in 10-litre pails, alternating layers of fish and layers of salt. At this stage, the fish are checked again for proper pickling, and any damaged or otherwise unusable fish are discarded. This is perhaps the most laborious job in the whole operation.

We have to handle every fish. We have ... about 33 pounds in the basket. And we dump on the table and we have to ... pile them into the buckets ... and then the top layer, you have to line them up. So you have their backs showing. And if there [are] soft ones, you know, you have to discard

them.... A hell of a lot [of work]. (B. and A. Peters 2009)

Along with freshness, uniform size is important. Stewart Gillis says "The buyer and market don't like small fish. Like the last run—if fish were smaller, maybe two or three inches smaller.... He doesn't like too much of that" (2009).

About 4.5 kilograms of gaspereau go into each pail. Once filled, they go into storage until they are shipped. At this point, the government department involved is the Canadian Food Inspection Agency, which collects and assesses comprehensive verbal and written records in order to ensure that the gaspereau are properly handled for export and human consumption (Canadian Food Inspection Agency 2008: 17). A good year might average 1,000 pails per fisher. The pails, each one showing the required information for payment, government records, and shipping, are set on the roadside to be picked up by the buyer as arranged. The pails are provided by the buyer; the fishers were charged \$3 per pail in 2011. At that time, the Margaree gaspereau fishers got \$20 per pail for their fish, a gradually increasing price; it had been \$13 just a few years earlier.

Having the pails ready for pickup at the specified time can be stressful. Once, when the buyer for the Peters's gaspereau was to come a day sooner than expected, the family found itself in a "real pickle," transferring gaspereau from the vats to the pails as quickly as possible (B. Peters 2009). Their good friend, Scott Macmillan, was visiting at the time and composed a tune, "Gaspereau Pickle," a play on words to remember the incident. In the style of Cape Breton Celtic music, the tune by the prominent musician was also in the Cape Breton music tradition of naming tunes for events in the lives of friends or relatives (Macmillan 2011).

Stewart Gillis remembers that "it was all barrels" in his father's and grandfather's time. As with the modern pickling, gaspereau and salt were added to the barrel in alternate layers to ensure thorough brining. The children had a tedious and difficult but significant role in the operation:

And we used to, on an average, every year we'd catch maybe 300 barrels of fish ... I can remember covering them, putting salt on top. And at that time, every barrel of fish

was a bag of salt, roughly. So we used to help tier them, you know, just ... line them up. We put about 200 pounds of fish in a barrel. And each tier of fish had to have salt, and then you had to make new pickle ... to ... cover them. Oh yes, wicked, terrible work! (2009)

Gillis recalls that the barrels came in by rail from the Nova Scotia mainland. They were then delivered to the fishermen by neighbour Peter Angus Gillis, who had a truck. Gerard Chiasson noted that, in some cases, the barrels were provided by the buyers; otherwise, the barrels were actually constructed by an itinerant cooper hired by the fisher (Chiasson 1974: 5).

Vincent MacKinnon described the constructed barrels as such:

The wood ... I'd say would be balsalm fir. Used to be steel hoops on them.... When they arrived, you soak[ed] the barrels so's they would swell ... and hold the pickle. You filled it full of water. Well, sometimes people used to have a place [in the river] where there wouldn't be current.... You just threw it in the water and let it soak in there.... The people also used to have what they used to call puncheons. Ninety-gallon molasses puncheons, they called it.... Yeah, they were big. (Personal communication, March 2, 2013)



The barrels of gaspereau were then hauled to Kenloch, where they were loaded onto a train to be shipped to Pier 21 in Halifax. "Geez, I was amazed. Thousands of barrels, right? From all over. And it wasn't just gaspereau, like, there [were] other kinds of fish.... The smell, you get the smell of the fish" (Gillis 2009). Since the 1960s, the fish were packed in twenty-kilogram pails.

Fig. 10 (opposite) Adding salt to pickling barrels. Photo by Wally Ellison. The same principal applied: they were packed in pickle, and the pickle had to be topped up if it leaked out or evaporated. When the fish were properly pickled, the pails were shipped.

Marketing and Commercial Export

Gaspereau has been important as both a local and export commodity for more than a century. Chiasson states that his great grandfather "hauled" salted gaspereau from Margaree to Halifax in 1885. He noted that, in his own experience, fresh gaspereau was also being shipped frozen to Europe to replace dwindling stocks of herring (Chiasson 1974: 5). In the early years of shipping gaspereau from Margaree, the fish were bought fresh and salted in Cheticamp by the buyer. But after the Second World War, it gradually became the established practice for the fishers to salt them by the river as they were caught, and then sell them packed in brine. MacKinnon remembers that fresh gaspereau were sent to Canso, possibly to be used in fishmeal: "They used to put a load of it on the truck ... by the time it landed down there, it was pretty well mush, and it was hard to do anything with it. Maybe fish meal or something" (2013). There were several consecutive fishmeal plants in Canso; the last one closed in the 2005.

There was a succession of buyers over the years, including Burns of Halifax, Robin Jones of Cheticamp, the Margaree Co-op and the Grand Étang Co-op. The United Maritime Fishermen, a fishermen-controlled agency that evolved in the 1930s (now called the Maritime Fishermen's Union), also bought, processed, and marketed gaspereau throughout the 1940s and 1950s (MacNeil 1945). Burns was the main buyer until the late 1970s. Later, that business was taken over by one of the Burns' directors, named J. J. Harnish. The buyers or their representatives were familiar figures at the river during the preparations for shipping. When Stewart Gillis's father sold fish to Burns, there was a representative or agent, probably a MacLean from Scotsville at the head of Lake Ainslie, who "came around" to see the fish to be shipped, to be sure the gaspereau were not from the end of the run. The agent arranged for the pick-up, and he delivered payment to the fishers.

Since the 1990s, one of the main buyers of Margaree gaspereau has been a family business, Gaudet and Ouellette, of Cap-Pelé, New Brunswick. The company is involved in buying and shipping a variety of fish from Atlantic Canada, including lobster, herring, and gaspereau. Margaree is their single source of gaspereau in Nova Scotia, but they also buy from fishers in New Brunswick. The Margaree River yields about 25 per cent of the total gaspereau exported by Gaudet and Ouellette each year. The average number of buckets from each Margaree fisher is 1,000, but sometimes it may be as many as 1,500 or 1,600 from particular fishers. The price per bucket averages \$20, but that may increase or decrease depending on the value of the Canadian dollar. Gaudet and Ouellette ship gaspereau only to Haiti, where they have two Haitian representatives who arrange for receipt of the shipments.

Haiti has long been the most important export destination for Margaree gaspereau. That gaspereau would be so valued in such an impoverished country is a point of empathy, and likely pride, for the Margaree fishers. Chiasson says: "They tell us that only one person may go in and buy one gaspereaux [sic]. They're that poor that all they could afford to buy would be one fish at a time" (1974: 5). Tony Cameron, who travelled to Haiti as part of a Canadian government-sponsored observer group, declared: "Haiti. Big dealers down there. Very poor people!" (2009). Cameron also noted that the poorest of the poor could not even afford to buy gaspereau.

These sentiments are shared by buyer Normand Ouellette, who has been to Haiti "quite a few times" to oversee the process of shipping, receiving, and marketing gaspereau. Ouellette was also strongly affected by conditions in that country. He observed that the gaspereau—cheap, bony, and used for bait in Canada—were a luxury for Haitians. "When I arrived there, I told my kids and my wife.... The poverty.... You got to see with your own eyes, to see the poverty. [It was] not sold like a whole fish. Fish cut in pieces, sold in pieces" (personal communication, March 7, 2012).

Conclusion

Narratives about the annual gaspereau fishery on the Southwest Margaree River contribute to social cohesion by involving the family and the wider community in an activity that is founded in historically based practice, values, and pragmatism. Narratives and, to a lesser extent, historical documents, help to contextualize the social experiences of the fishery within a framework of work patterns, scientific knowledge, official regulation, commerce, and personal reflection. At the same time, the narrative content implicitly reflects traditional perspectives related to natural processes affecting the land, the river, and the fish.

In extracting a resource to supplement farming livelihoods, the gaspereau fishery on the Margaree combines established tradition with necessity. Successive generations tell how the river can be bountiful and occasionally capricious; they tell of hard work and practical decisions. Deciding on a berth location and then moving it speaks of an awareness and a material connection with the river and its natural environment. The adoption of the tip trap, with full credit to its innovator-and using local skills to make the traps—shows openness and positive interest in improved technology. Recovering from the effects of floods, getting new equipment, and starting over demonstrates that the fishing families have the resilience necessary to respond to the occasional vagaries of Margaree springtime.

Gaspereau, the sign of spring on the Margaree River, is an "event" which brings together entire families in a long-standing fishery. The stories and anecdotes add to the family's understanding of the generational experience of the fishery—both the hard work and the amusing incidents. Children learn from an early age the importance of proper packing for sale; from their parents' reminiscing, they learn of concern for the wildlife connected to the river. Shared work and stories, along with photographs, carry the past forward to the present in the depiction of the material reality of harvesting, processing, and marketing of

gaspereau. The narratives can be said to function as an insurance of family solidarity through the gaspereau fishery.

Although the Margaree fishery is primarily family-oriented, there are instances, both formal and informal, where the local fishing community has had an active role. The common decision to adopt the tip trap, the formal association to bring about conservation regulation, and, historically, the development of a co-op to market the gaspereau all indicate community involvement with the fishery. The narratives discussed here also indicate commonly held perceptions about berth locations, natural phenomena on the river, and the Haitian market for gaspereau. Many of the local fishers interviewed had been to Haiti, or at least spoke knowledgably of the country's economic conditions. Even beyond the Margaree area, the acceptance of commercial interest in the fishery—buying fish, making barrels, and carrying out inspections—suggests a confidence in good work and a good product. The community narratives indicate a shared experience and shared participation in the fishery, and a common knowledge about the fishery, in which bonds are created through shared views, opinions, and attitudes.

On a more celebratory level, the anticipation of neighbours and friends as they gather at the river to await the run conveys an attachment to the gaspereau fishery in their community and a sense of social ownership. Ultimately, we have seen through the narratives that the gaspereau fishery represents a combination of planning, hard work, acceptance of government control, and an income source. The fishery also represents—possibly more importantly—enjoyment, personal satisfaction, and a chance to celebrate the culture of an annual occasion.

Notes

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- 1. The fish known as gaspereau on the Atlantic Coast of North America, of the family Culpeidae, includes two species, *Alosapseudo harengus* and *Alosa aestivalis*, both related to the herring. Alosapseudo harengus are the dominant species in the Margaree gaspereau harvest, making up about 95 per cent of the harvest (DFO 2001:5). Common names for gaspereau include "alewife," "saw back," and "river herring." *Ki'ak* is the historic Mi'kmaw name used in some parts of mainland Nova Scotia, while the Cape Breton Mi'kmaw word for gaspereau is *kaspelaw*, still in common usage.
- 2. Amelanchier, also called shadbush, serviceberry or sarvisberry, wild pear, juneberry, Saskatoon

- berry, sugarplum or wild-plum, and chuckley pear. It is a genus of about twenty species of deciduous-leaved shrubs and small trees in the Rose family (*Rosaceae*).
- 3. On November 16, 2014, CBC's Land and Sea program aired Gaspereau Fishery. Interviewed were Pierre Chiasson, son of Gerard Chiasson; Bobby Peters; and Tony Cameron. This author advised on the production.
- 4. Where participants finish each other's sentences, or where one filled in information within another's sentence, the quotation is attributed to both participants.

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