



Association de gestion halieutique autochtone
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FACTS ABOUT STRIPED BASS – *Ji'gaw - bar rayé - Morone saxatilis*

- The striped bass (*Morone saxatilis*) is native to our area and has coexisted with Atlantic salmon for thousands of years.
- It is an opportunistic species that feeds on a wide diversity of prey species such as plankton, insects, fish, and crustaceans.
- Striped bass are generalist predators and will eat any available prey in their environment.
- On occasion, they will eat juvenile salmon when present, though it does not appear to account for a significant part of their diet.
- Striped bass spend the summer feeding in the ocean and then migrate back to their freshwater wintering areas (generally located near the rivers where they spawn);
- The striped bass is not well adapted to cold winter ocean waters, where temperatures can drop below the freezing point. Individuals may sometimes remain in the ocean until late fall, when the water temperature can drop drastically and suddenly. In such cases, they may have to retreat to nearby fresh water, preventing them from migrating to their usual wintering areas.
- When water temperatures start to rise in the spring, striped bass begin to move from wintering habitat in fresh water to their spawning and feeding habitats – they can travel distances of up to 50 km per day.
- It generally takes them a few days to reach their spawning grounds (Miramichi in New Brunswick for the southern Gulf of St. Lawrence population). Generally, spawning occurs in late May.

Species status & distribution trends

- There are two distinct striped bass populations in Québec: the St. Lawrence River population and the southern Gulf of St. Lawrence (sGSL); population.
- The St. Lawrence River population primarily inhabits the area from Lac St-Pierre to about Rivière-du-Loup and up to the Saguenay region on the North Shore. Individuals from this population occasionally appear between Rivière-du-Loup and Cap-Gaspé. This population has been designated as an **extirpated species** under Canada's **Species at Risk Act**. Therefore, fishing is prohibited for this population.
- The southern Gulf of St. Lawrence striped bass population occupies a vast territory including the Gulf and extending as far as Rivière-du-Loup in the St. Lawrence River. It appears to be expanding northwards, although its northern limit is currently undetermined and under review.
- The sGSL population declined to less than 5,000 spawners in the late 1990s and the commercial fishery closed in 1996; the recreational and Aboriginal fisheries were closed in 2000.
- As of 2018, the Department of Fisheries and Oceans (DFO) estimates the number of spawners in this striped bass population to be about 1,000,000 individuals.
 - *The estimate is derived from striped bass by-catch in the Northwest Miramichi River gaspereau fishery and is also informed by mark-recapture and acoustic telemetry, DFO 2018.
- A small number of food, social, and ceremonial (FSC) fisheries were reinstated in 2012.
- The recreational fishery reopened in 2013.

SOURCES:

DFO (Department of Fisheries and Oceans). 2018. *Spawner abundance and biological characteristics of Striped Bass (Morone saxatilis) in the southern Gulf of St. Lawrence in 2017*. DFO Can. Sci. Advis. Sec. Sci. Resp. 2018/016.

DFO.2018. <http://www.glf.dfo-mpo.gc.ca/Gulf/FAM/Recreational-Fisheries/FAQ-Striped-Bass>

MFFP (Ministère des Forêts, de la Faune et des Parcs) 2018. <https://mffp.gouv.qc.ca/>

Valiquette, E., M. Legault, J. Mainguy, V. Bujold and A.-M. Pelletier. 2018. *Répartition du bar rayé au Québec – mise à jour des connaissances*, Ministère des Forêts, de la Faune et des Parcs, Québec, V + 17 p.



The **Ji'GAW** Project



AGHAMM + MMAFMA
Association de gestion halieutique
Autochtone Mi'gmaq et Malécite

The Mi'gmaq Maliseet Aboriginal Fisheries Management Association (MMAFMA) conducted a research project over the last two years (2016-2017) that aimed to characterize the presence of juvenile (0+) striped bass – or *Ji'gaw* in Mi'gmaq – along the south coast of the Gaspé Peninsula, in partnership with *La Nation Micmac de Gespeg*, the Micmacs of Gesgapegiag and the Ministry of Forests, Wildlife and Parks (MFFP).

CONTEXT

The project was born of a need, expressed by members of the communities, to closely monitor the striped bass which is making a remarkable come-back in our waters. Its distribution patterns after the fish leave their presumed spawning grounds (Miramichi River in New Brunswick) are still poorly known, as are how and where they disperse along the Gaspé coast.

OBJECTIVES

- Obtain scientific data on the striped bass (*Morone saxatilis*) while encouraging the involvement of Gespeg and Gesgapegiag First Nation community members;
- Determine whether juvenile (0+ young of the year – YOY) striped bass were present along the south shore of the Gaspé Peninsula and characterize their habitat; and
- Acquire scientific data on coastal aquatic wildlife while monitoring the return of the striped bass in the area.

RESEARCH METHODS

- The scientific protocol developed and followed for the purpose of this research was inspired by the MFFP *Protocole d'échantillonnage du Réseau de suivi ichtyologique du fleuve Saint-Laurent* (Deschamps 2011);
- Using beach seine nets, two field teams sampled specific stations three times over a period of 9 weeks from July to September in both 2016 (69 stations) and 2017 (64 stations) (Figure 1); and
- Beaches and estuaries between Pointe-à-la-Croix and Forillon National Park were sampled – the various fish/crustacean species caught were identified and counted and the habitat characteristics recorded.

Crew	Striped bass caught 2016	Striped bass caught 2017
Gesgapegiag	8	3
Gespeg	43	13
Total	51	16

RESULTS

- No juvenile (0+) striped bass were caught during either year;
- A total of 16 sub-adult or adult striped bass were caught in 2017, compared to 51 in 2016;
- A total 34 different fish /crustacean species were captured during both sampling years; and
- In addition to the striped bass, 4 other species considered to be at risk to varying degrees by the provincial and federal governments were caught: American shad (*Alosa sapidissima*), American eel (*Anguilla rostrata*), Atlantic salmon (*Salmo salar*) and lumpfish (*Cyclopterus lumpus*).

WHAT'S NEXT?

The 2018 research project will continue with an emphasis on the probable wintering and potential spawning areas of the striped bass. Individuals were observed overwintering near the Anse-au-Griffon and Malbaie rivers. MMAFMA intends to sample those areas towards the end of summer 2018 to detect the presence of juvenile (0+) striped bass.

* Updates will be available via our Facebook page and full reports for this research project are available on the MMAFMA website: AGHAMM.CA

ACKNOWLEDGEMENTS

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SAMPLING STATIONS ALONG THE COAST

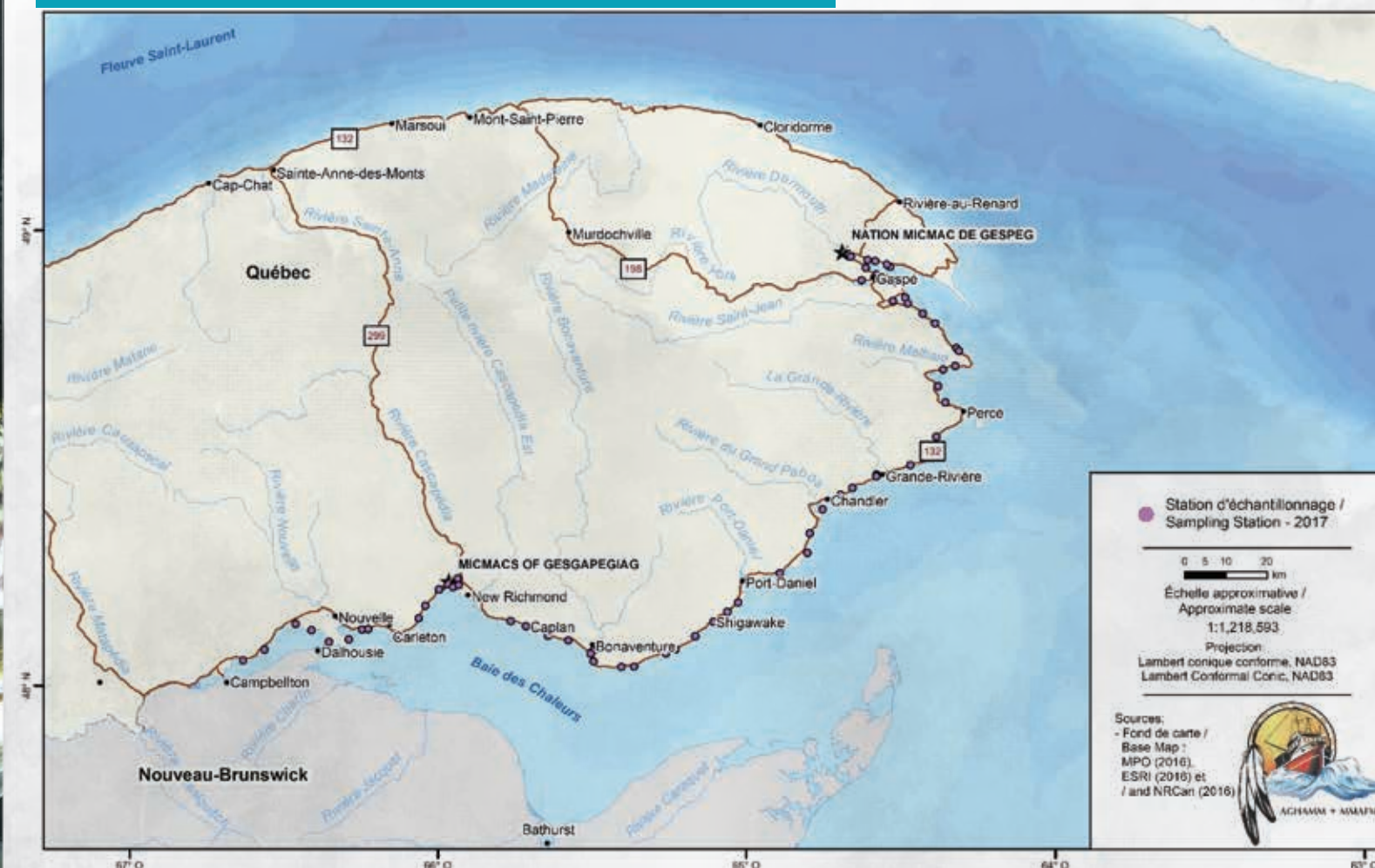


Figure 1