**From:** Loboda, Sarah (DFO/MPO) <[Sarah.Loboda@dfo-mpo.gc.ca](mailto:Sarah.Loboda@dfo-mpo.gc.ca)>

Thank you very much Susan for your quick reply and you help.

All the contacts, this is exactly what I needed to start our investigation 😊

Hi Nellie,

I attached more pictures to this email.

Regarding prevalence, in stations where the ‘disease’ was present, a rough estimate would be 25-30% of crabs were infected. But only few stations on the north shore of the estuary near Forestville were concerned, mainly stations in shallow waters (less than 100 meters), with high density of small crabs (the specimen in the pictures were caught at 27m depth with the highest density of crabs recorded during the survey). However, those observations are just estimations as we did not document the number of stations nor the number of infected individuals vs. healthy during the survey.

In terms of description, I’m not good for that but I would say that where the spots where present the background shell was soft/slack and transparent (you could see the organs through in the center when the spot was big enough) and there was some white/yellow spot on top for some crabs (not all) but I could not say if it was calcified.

We have no indication that it affects the animal. We catch them with a trawl and when the snow crabs are on the deck, they don’t move much, even when healthy, as it is too hot for them, especially in July.

We have 4 small specimens frozen from last summer, for two of them the soft/transparent infected part of the shell has blackened. We can ship them if you want for further examination.

There is a survey planned this summer that goes near Forestville in July, in shallow water because the survey is mainly for whelk. They usually catch a lot of small snow crabs and we would like to be guided to develop a protocol to document properly the prevalence/severity of the ‘disease’ if we find infected crabs. For example, we do not know if the preservation of crabs by freezing them is the best practice if molecular analyses are needed to id the pathogen. Maybe ethanol of formol might be best?

I am really busy for the next few days because our snow crab assessment is next week (14-16th February) but if it is ok with you, we can arrange the shipping of specimen and plan a meeting later this month to discuss what could/should be done.

Amy, Cathryn, let me know if you would like to be involved/informed or examine some specimen too.

Many thanks,

Sarah Loboda, Ph.D.

(elle/la/she/her)

Biologiste, Sciences aquatiques  / Biologist, Aquatic sciences

Pêches et Océans Canada / Fisheries and Oceans Canada

Direction des sciences démersales et benthiques / Demersal and benthic sciences branch

Institut Maurice-Lamontagne

C : 418-953-9807

Dear Dr. Bower,

I’m the new biologist responsible for stock assessment of snow crab in Québec. I found your contact on this page: [https://www.dfo-mpo.gc.ca/science/aah-saa/diseases-maladies/index-eng.html](https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.dfo-mpo.gc.ca%2Fscience%2Faah-saa%2Fdiseases-maladies%2Findex-eng.html&data=05%7C02%7CTobie.Surette%40dfo-mpo.gc.ca%7Cfdc5baf23a364dcd51a908dc28125317%7C1594fdaea1d94405915d011467234338%7C0%7C0%7C638429306411768500%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=05P5gQQmcPvpLABqLwIQh4Lht8PoBHvo2YKmUZzLTQs%3D&reserved=0)

I am looking for experts on shell disease at DFO. During our annual trawl survey in the Estuary of the St-Lawrence, we found a lot of crabs with rugged white spots (see pictures). We were surprised as we never saw that many diseased crabs and the disease seems ‘new’ as even Bernard Sainte-Marie who has done research on snow crabs in the St-Lawrence since 1980’s has never seen such lesions on crabs.

We are working on a protocol to report the prevalence of this disease with our colleague Catherine Couillard.

Do you know who I should contact to help us identify the pathogens behind this infection?

Thanks a lot,

Une image contenant invertébré, crustacé, fruit de mer, crabe

Description générée automatiquement

Sarah Loboda, Ph.D.

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