Climate change and community fisheries in the Arctic:
A case study from Pangnirtung, Canada

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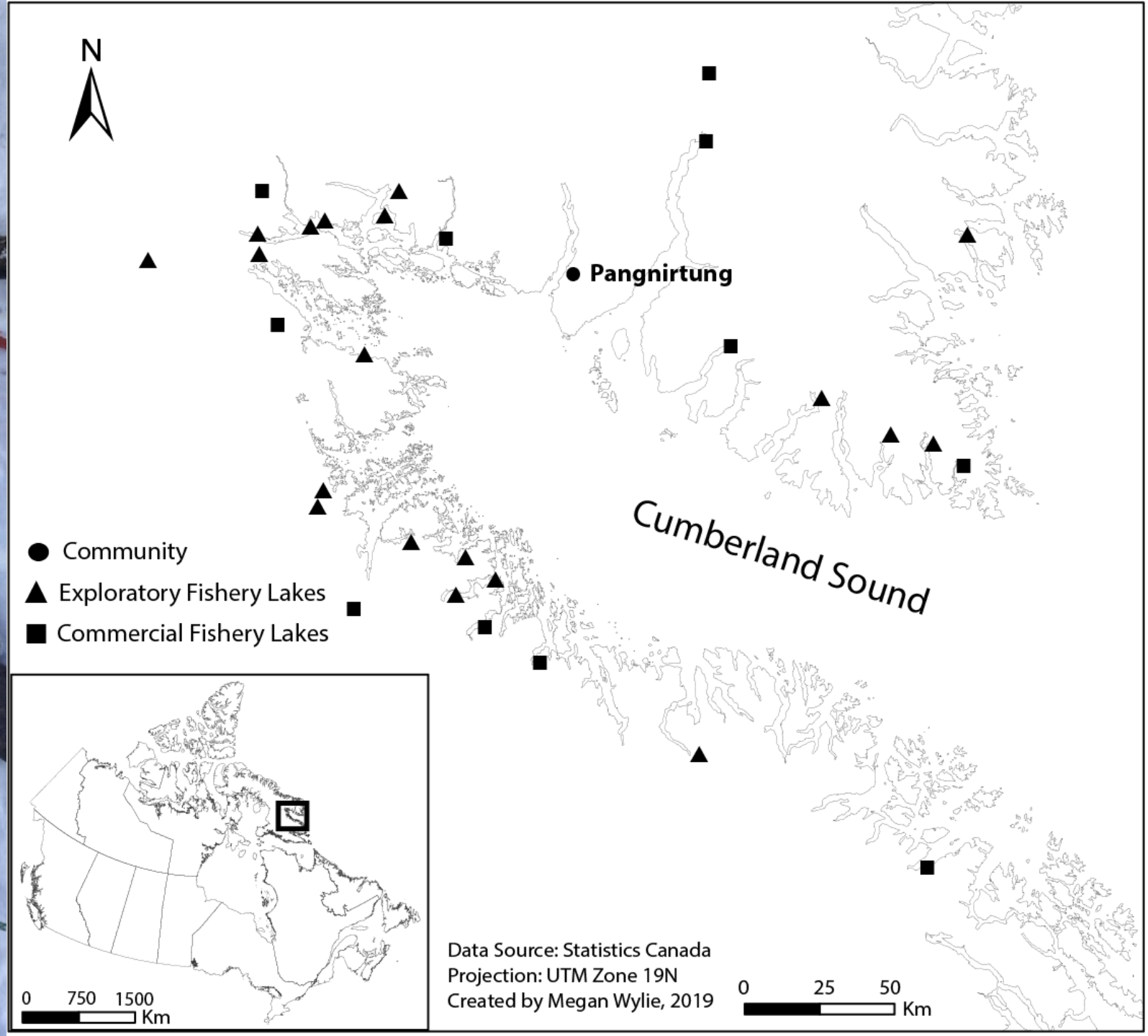
ACAF webinar on Arctic Climate Adaptation

Pangnirtung, Baffin Island

Turbot


N
Pangnirtung
Cumberland Sound
Community
Exploratory Fishery Lakes
Commercial Fishery Lakes
0 750 1500
Km
Data Source: Statistics Canada
Projection: UTM Zone 19N
Created by Megan Wylie, 2019
0 25 50
Km


January


April


Pangnirtung
June

Community profile

- Population: ~1500 (99% Inuit)
- Language : Inuktitut
- Isolated flying community (no roads)
- Livelihoods: fishing, hunting
- Supplies: boat during the summer

- High rates of food insecurity
- Housing shortages
- Low rates of high school graduation

Community gathering (Summer 2017)

Hunting and fishing

Inuit country food

Pangnirtung harbor

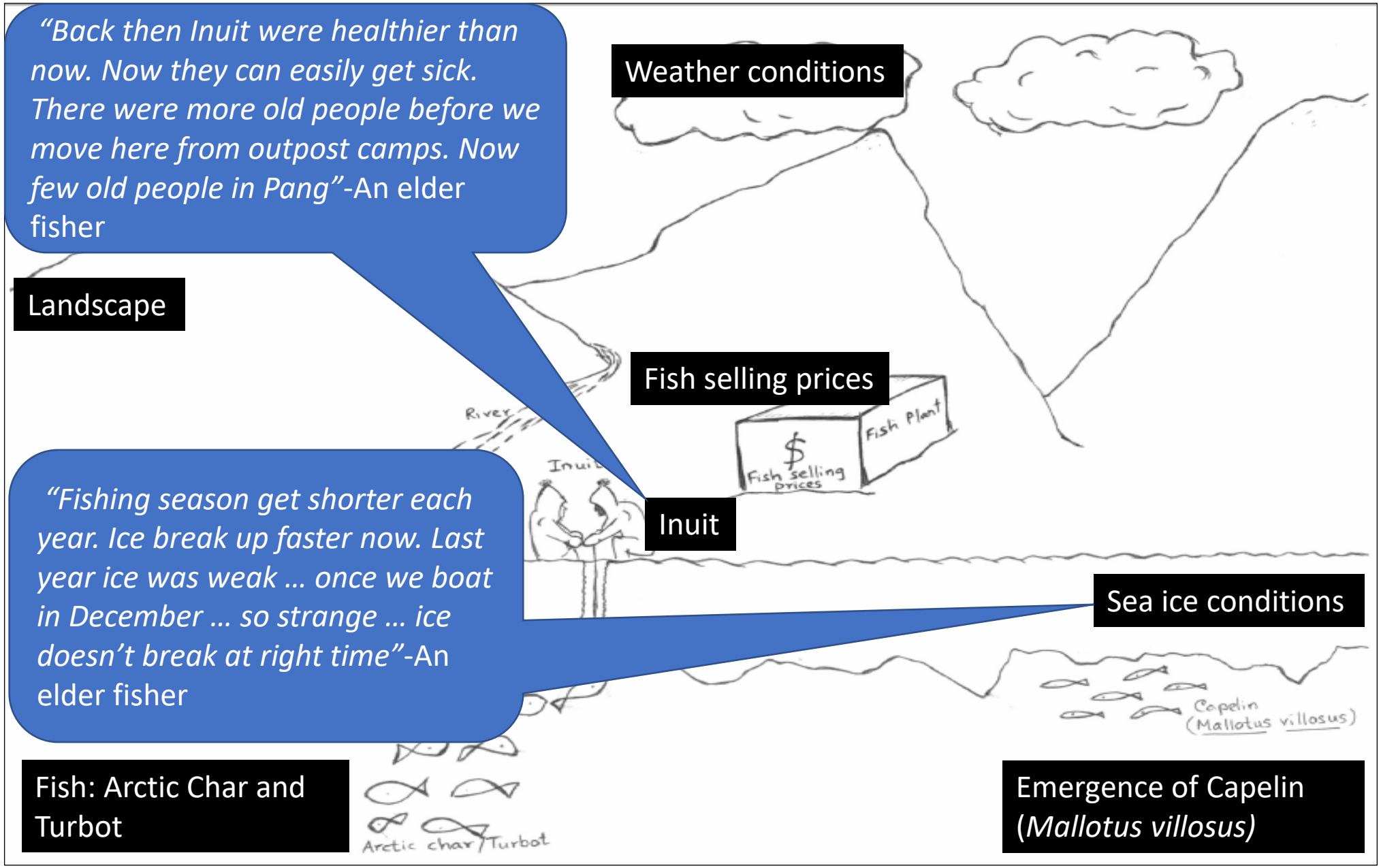
*Products:

- Arctic char (*Salvelinus alpinus)*
- Turbot (*Reinhardtius hippoglossoides*)

Arctic char fishery

Turbot fishery

How do Inuit fishers experience change?



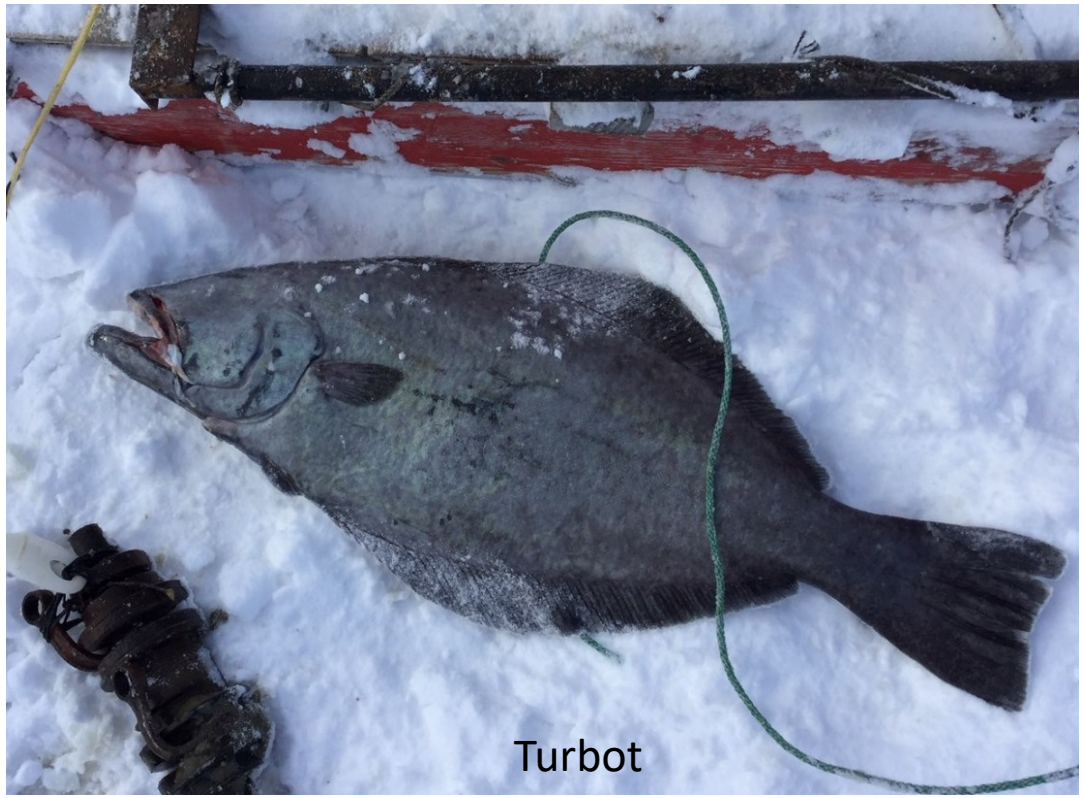
How do Inuit respond to change?

Community-level adaptive strategies:

- Diversification (co-existing fisheries, country food)
- Technology use (GPS/VHF radio, internet-based social media)
- Co-management approach for fisheries governance (partnerships, sharing power and responsibility)

Place-specific attributes:

- Inuit worldviews
- Inuit-owned institutions
- A culture of sharing and collaborating
- Indigenous and local knowledge systems


Turbot

Thank you! ᓇᓗᓇᐃᖏᑦᑐᖅ!

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For more details:

- Galappaththi, E.K., Ford, D.J., Bennett, E.M., and Berkes, F. 2019. Climate change and community fisheries in the Arctic: A case study from Pangnirtung, Canada. *Journal of Environmental Management,* 250 (109534): 11.

- Galappaththi, E.K., Ford, D.J., Bennett, E.M., and Berkes, F. 2021. Adapting to climate change in small-scale fisheries: Insights from Indigenous communities in the global north and south. *Environmental Science and Policy,* 116: 160-170.

- Galappaththi, E.K., Ford, D.J., Bennett, E.M. 2019. A framework for assessing community adaptation to climate change in a fisheries context *Environmental Science and Policy,* 92: 17-26.