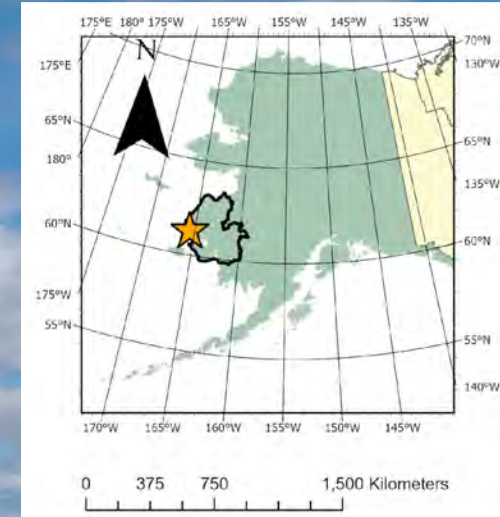


A decade of climate change research in the Yukon-Kuskokwim Delta, Western Alaska

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- Large river delta in N. America
- Susceptible to sea-level rise, increased storm surges and subsidence
- Other climate forces: increasing temperatures, earlier growing seasons, and shifting migratory goose arrival times and distributions
- 3 research projects examining how different factors of change play a role (alone and in combination) in altering ecosystem properties and processes in these high-latitude regions

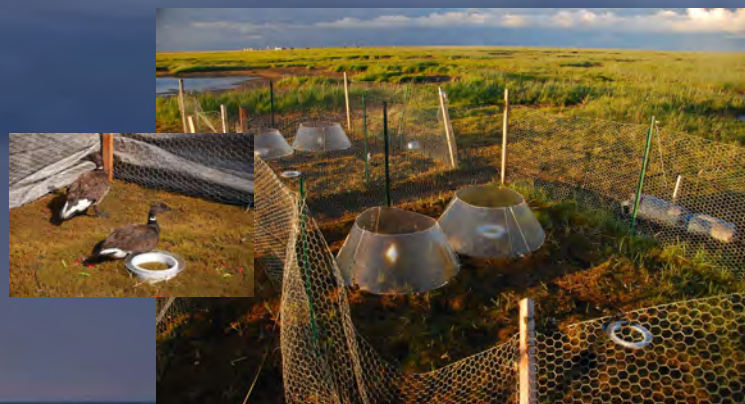


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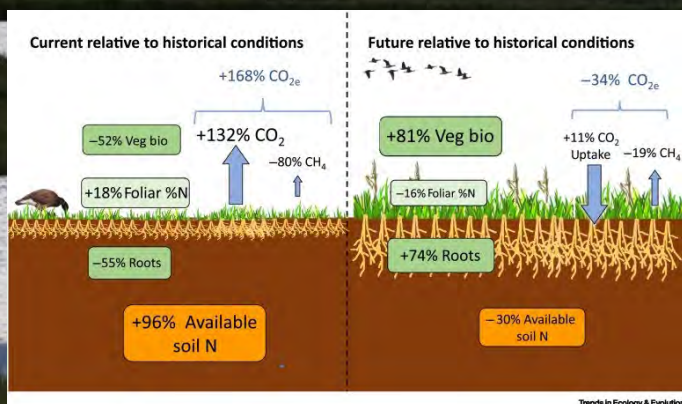
Changing the timing of the growing season and migratory goose arrival influences plant growth, carbon and nitrogen storage, and greenhouse gas exchange.

Increased flooding and warming, in light of changing goose herbivory patterns might influence communities from lowland wetlands to upland tundra

Effects of a 50-year Typhoon event, Merbok, on influence plant communities, phenology, species traits, and gas exchange



Flooding and warming in two plant communities – see posters by M. Petit Bon (community response) and K. Kelsey (carbon flux response)



A mesocosm experiment with flooding, warming, and herbivory treatments in three plant communities – see poster by T. Williams for vegetation and carbon flux responses