

Gut evacuation rate and grazing impact of the krill *Thysanoessa raschii* and *T. inermis* - DTU Orbit (09/11/2017)

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Gut evacuation rates and ingestion rates were measured for the krill *Thysanoessa raschii* and *T. inermis* in Godthåbsfjord, SW Greenland. Combined with biomass of the krill community, the grazing potential on phytoplankton along the fjord was estimated. Gut evacuation rates were 3.9 and 2.3 h⁻¹ for *T. raschii* and *T. inermis*, respectively. Ingestion rates were 12.2 ± 7.5 µg C mg C⁻¹ day⁻¹ (n = 4) for *T. inermis* and 4.9 ± 3.2 µg C mg C⁻¹ day⁻¹ (n = 4) for *T. raschii*, corresponding to daily rations of 1.2 and 0.5 % body carbon day⁻¹. Clearance experiments conducted in parallel to the gut evacuation experiment gave similar results for ingestion rates and daily rations. Krill biomass was highest in the central part of the fjord's length, with *T. raschii* dominating. Community grazing rates from krill and copepods were comparable; however, their combined impact was low, estimated as <1 % of phytoplankton standing stock being removed per day during this late spring study

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Authors: Tegllhus, F. W. (Ekstern), Agersted, M. D. (Intern), Arendt, K. E. (Ekstern), Nielsen, T. G. (Intern)

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