21-23 June 2022 EGM IWG7 Helsinki, Finland







# EG TF Report and recommendations

EGM\_IWG\_7.13- Rae McKenzie & Ingunn Tombre

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EGMP Greenland/Svalbard Barnacle Goose Task Force Report AEWA/EGMIWG/7.13

#### EG Barnacle Goose Task Force Report & recommendations

The agreed aims of the Task Force are:

- 1) Assist the EGM IWG in coordinating and catalysing the implementation of the ISSMP for the Barnacle Goose and its corresponding AFMPs for the respective populations under the EGMP;
- 2) Assist the EGM IWG in stimulating and supporting Range States in the implementation of the ISSMP for the Barnacle Goose and its corresponding AFMP for the respective population(s); and
- 3) Monitor and report on the implementation of these activities to the EGM IWG, as appropriate.

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### EG Barnacle Goose Task Force Report & recommendations

#### **Task Force Members**

Rae McKenzie (UK) Task Force Co-ordinator Richard Hearn (UK – WWT)

Svenja Auhage (IS) Colin Shedden (UK – BASC)

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Iben Hove Sørensen (DK) Eva Meyers (EGMP Secretariat)

Johan Svalby (SE)

Jesper Madsen (EGMP Data Centre)

Jessica Shaw (UK) Gitte Høj Jensen (EGMP Data Centre)

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- The task force has had one meeting since the last IWG
- Task Force members have also contributed to Agricultural Task Force meetings and webinars over the past year
- Work outwith meetings has focused on finalising the EG Barnacle Goose IPM and developing an Impact model.

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- Greenland barnacle goose population model completed
- Impact model in development partnership between NatureScot (UK) and NINA (Norway)
- HPAI

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# Impact model BG (retrospective analyses based on existing data)

- Exclosure experiments: grass heights in grazed vs. exclosed (Islay & Vesterålen Norway)
- Yield loss in relation to a goose abundance proxy

(mu) this series 100 - 1

month

Model predictions of treatment effects

on grass heights at Islay:

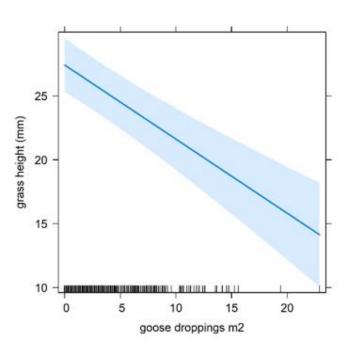
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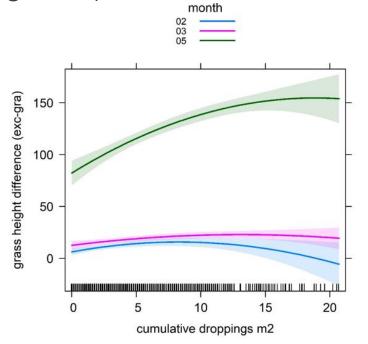


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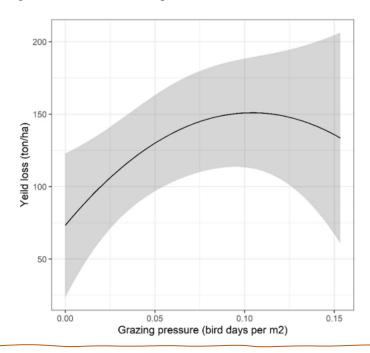
Model predictions of the relationship between **goose droppings** and **grass heigths** 



Model predictions of the effect of the cumulative **droppings** (m<sup>2</sup>) on the difference in **grass height** between **exclosed** and **grazed** plots



# Model predictions of grazing pressure on yield loss



**Dropping densities** translated to **number of geese** (Baveco et al. 2011)

Grass differences (exclosure-grazed) converted to yield loss based on modelled relationship from Vesterålen.

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Type of action	Actions from the ISSMP	Priority	Timescale	Greenland/Svalbard Task Force
	4.2 Assess periodically, and report to the AEWA EGM IWG, the cumulative impact of derogations (as well as hunting in Range States in which derogation is not required) on the development of the population, the likelihood of serious damage to agriculture and risk to air safety and to other flora and fauna (including the Arctic ecosystems), and the non-lethal measures taken to prevent damage/risk, as well as the effectiveness of these. If necessary, coordinate the derogation measures between Range States to avoid risk to the population and to enhance effectiveness of the measures.	Essential	Short	Impact model update / review and preparation of documents going to EGM IWG / providing recommendations
	A.1 Produce and update periodically, spatially explicit population size estimates based on agreed international monitoring	Essential	Short / Rolling	Consultation – Greenland population census due in 2023
	A.2 Maintain an annually updated bag statistics database including geese taken by any means (whether under derogations or, in those Range States in which it is permissible, hunting)	Essential	Ongoing / Rolling	Consultation
	A.3 Maintain a spatially explicit database on goose damage to agriculture, other fauna and flora and fauna and risk to air safety	Essential	Medium / Rolling	Consultation
National	2.2. Provide accommodation areas to reduce risks and conflicts at sensitive areas through e.g. subsidies[2]	Medium	Medium/ Rolling	Information exchange
National	2.3 Apply scaring and/or land management techniques to reduce the attractiveness of sensitive areas to geese, monitoring the implications of such local displacement for conflicts at wider scale[3]	High	Short / Rolling	Information exchange

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	3.2 Establish an internationally coordinated programme to assess agricultural damage including monitoring and assessment protocols	High	Short	Consultation
National	3.3 Liaise with farmers affected by goose damages to reduce agricultural conflicts	High	Short / Rolling	Information exchange
	4.3 Improve effectiveness of derogation measures through experimenting with different timing and methods and better understanding the relative efficacy of lethal versus non-lethal scaring techniques	High	Medium	Information exchange - Liaise with other TFs
	4.4 Promote best practices of goose population adjustment including timing to minimize damage and significant disturbance to other species	Medium	Medium / Rolling	Information exchange - Liaise with other TFs
National	4.5 Maintain low crippling rates	High	Medium / Rolling	
	4.6 Improve derogation shooting techniques to further reduce crippling	Medium	Long / Rolling	Information exchange - Liaise with other TFs
	A.4 Collect demographic (mortality, reproduction, differential migration and connectivity) data from an agreed representative sampling framework across the range	High	Short / Rolling	Consultation
	C.1 Develop and implement a communication strategy and plan	Medium	Short / Rolling	Liaise with other TFs -

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#### EG Barnacle Goose Task Force Report & recommendations

Recommendations – Actions by IWG

- Follow work plan as set out in previous slides consider how we respond to HPAI
- Agree process for using the EG Barnacle Goose IPM
- Complete Impact Model
- Develop IPM for the Svalbard barnacle goose population