



## 3<sup>rd</sup> Meeting of the AEWA Svalbard Pink-footed Goose International Working Group

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### Meeting summary, decisions taken and recommended actions

The International Working Group (IWG) for the Svalbard Pink-footed Goose (SPfG) met on the 10<sup>th</sup> and 11<sup>th</sup> December 2015 in Ghent, Belgium. There were a number of key objectives for the meeting (*see Annotated Agenda Doc: SPfG IWG 3.1*)<sup>1</sup> which were open for discussion within the International Working Group (IWG) and needed agreement on, to ensure the continued successful implementation of the International Species Management Plan (ISMP). These concerned two main areas for which the IWG was expected to agree and provide recommendations on:

1. The AEWA SPfG ISMP strategy for the next 3 year cycle from 2016-2018
  - 1.1. Yearly decision cycle and harvest quotas
  - 1.2. Wounding of geese (termed crippling)
  - 1.3. Non-hunting actions
2. The future structural / organizational requirements for ISMP and its effective implementation, taking in to account:
  - 2.1. Costs and benefits of the SPfG ISMP process
  - 2.2. New modelling requirements / developments for the Adaptive Harvest management (AHM) and monitoring of the population
  - 2.3. Development European Goose Management Platform (EuroGMP)
  - 2.4. Next meeting and selection of next Chair country for the SPfG IWG

Updates, discussions, key decisions taken and further actions assigned are summarized below.

### 1. SPfG ISMP strategy for 2016-2018

#### 1.1 Yearly decision cycle and harvest quotas

At the 1<sup>st</sup> IWG meeting, held in April 2013 in Copenhagen, Denmark it was agreed that implementation of ISMP would follow a three year regulatory harvest management cycle, with annual reviews to assess the status of the 'pinkfoot' population. A recommended harvest quote for the first 3 year cycle (2013-15) was outlined in a Danish Centre for Environment and Energy (DCE) Technical Report published in the same year<sup>2</sup>. As part of a review of the current AHM strategy, presented by Fred Johnson, USGS it was noted that opting for a 3-year strategy helped to stabilize harvest quotas but at a cost of much larger quota changes when they had to be implemented. Johnson further commented that harvest strategies had become more knife-edged, as result of population dynamics that lacked density dependence and the desire to keep the population size within a narrow range (circa 60,000 individuals). As the currently favoured population models continued to exhibited exponential growth Johnson

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<sup>1</sup> Link to Agenda: <http://www.unep-awea.org/en/meeting/3rd-meeting-awea-svalbard-pink-footed-goose-international-working-group>

<sup>2</sup> Link to Report No. 28: Adaptive Harvest Management Report 2013-2015: <http://pinkfootedgoose.awea.info/node/83>

concluded that a 3-year harvest strategy was much less likely to control the potential for further exponential growth or decline, and would likely result in extremely variable harvest quotas. Johnson acknowledged there was a desire to dampen the variability in harvest quotes and outlined a number of options to achieve this. Johnson outlined the implications of the favoured option, whereby the desire for less quota variability was incorporated in the objective function used for optimizing harvest strategies within an annual decision cycle. Jesper Madsen subsequently presented a proposed AHM decision cycle and timeline for the required decision process if a yearly cycle was to be adopted [appendix 2 & 3]. This decision cycle would require population assessments, harvest recommendations and implementation of any changes in harvest regulations within a short period between May and June each year, before hunting open seasons commenced. The IWG was invited to discuss the necessary requirements to implement an annual harvest management strategy as well as other harvest related matters (e.g. crippling) as part of a dedicated breakout session.

### **Decisions**

The IWG agreed to switch to an annual AHM decision cycle with harvest quotas set each year based on continuing annual population status reviews. It was agreed that the first annual AHM strategy would be implemented in time for the 2016-17 hunting season. Norway will instigate a harvest quota system where hunters shooting pinkfeet will be obliged to report their bag on a daily basis; the hunting season will be closed by an administrative order when the annual quota has been reached. Denmark will continue to regulate the annual harvest by annually setting the length of the hunting season.

### **Actions**

The necessary procedural changes (management and regulatory) will be implemented by the relevant range states (primarily Norway and Denmark) before June 2016 in order to implement an annual AHM strategy. The Coordination Unit will circulate and publish a detailed timeline for the AHM decision cycle in 2016.

## **1.2 Wounding of geese**

A key action of the ISMP is to ensure that the wounding of shot geese (termed crippling) is kept at a minimum. At the 2<sup>nd</sup> IWG meeting, held in October 2014 the IWG agreed that the intention was to maintain a decreasing trend in the crippling rate. A research and monitoring program has been in place since the mid-1990s, run by Aarhus University and the Danish Nature Agency<sup>3</sup>. An update on the latest crippling monitoring, undertaken in 2014-15, was given at the meeting by Kevin Clausen, Aarhus University. The results showed the percentage of geese x-rayed with pellets (crippling rate) had declined since the start of the monitoring programme. This coincided with the Danish Nature Agency and Hunters Association having instigated an action plan and run a number of awareness campaigns highlighting the issue of crippling. However, there had been a slight increase in the crippling rate in 2009 & 2011 but it had declined again in 2015. Clausen stressed that the crippling rate assumed constant harvest of the population, which had not been the case in recent years as the harvest rate had also increased. Clausen commented that an increase in harvest would likely cause an increase in the crippling rate, since the more birds that are shot at, the higher the percentage likely to have embedded pellets. To account for changes in the harvest rate Clausen presented a new measure, the 'crippling ratio' that represented the number of geese crippled for every goose killed. The latest analysis indicated that there had been a declining trend in the crippling ratio, falling from 13 birds crippled per 10 birds killed in 1997 to 2 birds crippled per 10 birds killed in 2015. This was a very positive story, illustrating the benefits of determined efforts both at grass-root and at national management levels to tackle this issue. Clausen concluded that there was still a need to continue monitoring crippling, and that a continued focus on a declining trend is important for societal acceptance of hunting as a management tool.

### **Decisions**

The IWG agreed that continued monitoring of crippling was an important part of the ISMP process and although there had been a very encouraging decline in the crippling ratio there was still room for improvement. The IWG agreed that there should be continued focus on efforts by relevant organisation to promote good hunting practices to maintain the decreasing trend in crippling.

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<sup>3</sup> Link for more information: <http://pinkfootedgoose.aewa.info/node/194>

## **Actions**

The Norwegian and Danish Nature Agencies and Hunting Associations will work together to develop joint awareness campaigns about crippling, in particular highlighting ways to reduce it. An English language report detailing the latest results will be published (currently only available in Danish<sup>4</sup>) and the Coordination Unit will make this publically available on the AEWA Pink-footed Goose IWG website as soon as it is completed.

### **1.3 Non-hunting actions**

The ISMP also endorses the use of non-hunting actions to lessen goose-agricultural conflicts as a result of geese foraging and trampling on crops. Three out of four of the range states (Norway, Netherlands, & Belgium) have some form of compensation or subsidy scheme in place to address impacts of geese on farmland. At the 2<sup>nd</sup> IWG meeting, held in October 2014 in Sneek, Netherlands it was agreed that the Coordination Unit would collate and assess compensation and subsidy payments along the flyway, based on data provided by the relevant ranges states. This data was presented at the meeting by James Williams, Aarhus University along with an initial assessment of the link between population size and levels of compensation payments. As part of a 2<sup>nd</sup> breakout group the IWG was invited to discuss the effectiveness of compensation and subsidy schemes in alleviating goose-agricultural conflicts, as well as other possible management actions e.g. the development of goose related tourism. It was concluded that compensation and subsidy schemes, where well designed, targeted and operated had worked effectively to minimize conflicts. The benefit of setting aside designated agricultural areas that allowed / excluded geese, so called 'go' & 'no go' areas as well as scaring activities was not clear, based on Dutch studies. The economic and environmental impacts of scaring, distributing or concentrating geese were not fully understood, particularly where multiple goose species interact. It was suggested that further studies were needed to understand / evaluate the impact of different goose populations on grasslands / crops and biodiversity. Regarding goose tourism it was concluded that this currently offered limited potential to minimize goose conflicts directly with farmers, as they tended not to be primary beneficiaries. Nevertheless, it was recognised that goose tourism could help to promote a broader perspective of people valuing nature / eco-systems services. This would require the development of long term rural tourism initiatives; involving farmers to ensure mutual benefits. It was regarded that goose tourism was not just about 'softening' potential conflicts with farmers. Tourism initiatives should directly benefit and help farmers' value geese as source of income, along with other organizations involved in land management and nature conservation. The Danish Ornithological Society (DOF) had expressed their desire to learn of ways to develop goose tourism, particularly from Belgian experiences.

At the 2<sup>nd</sup> IWG meeting held in Sneek, The Netherlands an update was given about the restoration and protection of traditional grasslands in Belgium.<sup>5</sup> These actions are regarded as key in preserving the high nature value (biodiversity) and cultural heritage of Flemish coastal polder areas. In addition, along with maintaining a ban on hunting pink-footed geese, the desire of the Flemish authorities and conservation organizations is to create a 'safe harbour' for pink-footed geese. With EU Life funding concrete progress has been made in restoring traditional grassland sites within SPA and Natura 2000 sites. These developments were seen first-hand by the IWG during a visit to the East coast polder region where several grassland restoration projects had been initiated, helping to maintain biodiversity as well as raising public awareness of the value of nature conservation at large.

## **Decisions**

The IWG acknowledged and agreed the need to continue sharing data on compensation / subsidy payments as well as findings and conclusions of studies evaluating compensation / subsidy schemes. In addition, it was agreed that the IWG should collectively investigate the need and potential for further studies to assess the impact that multiple goose species have on agricultural lands and associated economic, social and environmental costs. Potential sources of funding would be explored if new studies are deemed necessary. Goose tourism was recognised as a potential means to encourage the public and farmers to value geese. It was agreed that for those interested parties it would be very beneficial to exchange experiences and information about developing goose tourism activities. Natuurpunt, the Belgian Birdlife partner was very willing to share their experiences with DOF.

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<sup>4</sup> Link to Danish report on crippling: <http://dce2.au.dk/pub/TR70.pdf>

<sup>5</sup> Link to 2<sup>nd</sup> IWG Meeting Report

## **Actions**

Coordination Unit will continue to liaise with the National Focal Points and Experts to continue collating and consolidating compensation and subsidy payment data from the range states, as well as working with relevant institutions to determine the effectiveness of compensation / subsidy schemes. The Coordination Unit will facilitate the exchange of information between those interested in developing goose tourism initiatives.

## **2. Future of the SPfG IWG and ISMP**

### **2.1 Cost and benefits of SPfG ISMP process**

In 2014 the Coordination Unit was requested by the Danish Nature Agency to prepare a business plan for continuing the ISMP management process in the longer-term (2016 onwards), as well as to demonstrate it was cost-effective. In response the Coordination Unit carried out a Cost Benefit Analysis (CBA) of the adaptive management process to date, evaluating the cost and benefits of the management process using 3 assessment categories: economic, social and environmental. The results of this preliminary evaluation were presented at the meeting by the Coordination Unit. The initial conclusions were that economic costs and benefits of implementing the ISMP largely outweigh each other. The assessment presented illustrated that by maintaining a stable population at the agreed population target crop damages would be reduced and, hence, compensation payments. However, a restricted population target potentially limits hunting rental revenues as a means to compensate farmers for hosting the geese (where hunting is permitted e.g. Norway and Denmark). Furthermore, the social and environmental outcomes of implementing the ISMP were regarded as predominately beneficial. It was stressed that social and environmental costs and benefits were difficult to express in economic / monetary terms; their monetary value and importance are highly dependent on the perspective of the stakeholder. The Coordination Unit requested further input from the IWG, in order to finalise the CBA of the ISMP implementation process. In particular, input from IWG delegates was needed as to how they value and prioritise the different objectives and outcomes regarding economic, social and environmental criteria.

## **Decisions**

The Coordination Unit will continue working on the Cost Benefit Analysis (CBA) of the ISMP process. The IWG agreed to provide the further input and data for the CBA as part of an Analytic Hierarchy Process (AHP).

## **Actions**

The Coordination Unit will distribute to the IWG an electronic tool for their input, in order to assess and weight the different outcome criteria of the ISMP. The Coordination Unit will also publish a written report on the CBA and its findings.

### **2.2 Modelling and monitoring developments**

The IWG was updated on the current modelling approach used to determine the AHM strategy for the pink-footed goose, in a presentation given by Fred Johnson, USGS. Johnson noted that the current population models had performed adequately to date but improvements could be made. An alternative modelling approach using an Integrated Population Model (IMP) would be beneficial, as suggested in a Dutch review of the pinkfoot AHM process undertaken by the Dutch Ministry of Economic Affairs<sup>6</sup>. Furthermore, Johnson added that there had been some data inconsistencies, in particular between growth rates based on population counts and estimates of survival and reproduction resulting in difficulties in predicting the pinkfoot population development. An IMP could help improve estimates and better account for biases in the available data and Johnson added that work had already started on developing an IMP. Population counts are a critical part of the AHM process and Jesper Madsen; Aarhus University presented the most recent population estimate based on an internationally coordinated census count conducted in November 2015. As part of the AHM process two population counts are conducted each year, one in May (pre-breeding) and another November (during the hunting season). The May population estimate is used to review the harvest strategy annually and the data and any recommendations are published in ISMP Annual Reports<sup>7</sup>. Madsen recapped that in May 2015 the pink-footed goose population was estimated at 59,000, which represented a significant decline of the population, achieving the agreed target of

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<sup>6</sup> Link for more information: <http://pinkfootedgoose.aewa.info/node/148>

<sup>7</sup> Link for ISMP Annual Reports: [http://pinkfootedgoose.aewa.info/report\\_series](http://pinkfootedgoose.aewa.info/report_series)

about 60,000. However, the November 2015 census count estimated the population at 75,000 individuals. Madsen concluded that the May 2015 estimate was too low and may have been at c. 70,000 geese (subtracting productivity and estimated adult mortality during May-October from the November 2015 estimate). Madsen noted that this highlighted the difficulties in conducting population counts and estimating population sizes. Furthermore, Madsen recognised that this new population estimate would have had implications for the current harvest regulations, particularly in Denmark. The hunting season had previously been extended in Denmark to include January but in accordance with recommendations in the May 2015 AHM Annual Report had been shortened again to 31st December. Since annual adaptive harvest management decisions are dependent on reliable population estimates Madsen proposed a number of ways to improve census counts and estimates of the population size.

### **Decisions**

The IWG agreed that the recommendations made in the May 2015 AMH Annual Report were based on the best available knowledge at that time, based on agreed protocols, and recommend it not to be changed. The IWG agreed with the recommended suggestions to improve population monitoring protocols, by intensifying the efforts for more systematic searches of geese within and outside the known staging areas, both in May and November. It was agreed that Sweden should continue to participate in internationally coordinated population counts, as more and more pink-footed geese are recorded there. Furthermore, it was recommended that an alternative population estimate shall be derived, based on marked geese in the population.

### **Actions**

The Coordination Unit will prepare a news release on the November population status update and, after its approval by the IWG, will publish this on-line<sup>8</sup>. The Coordination Unit will immediately instigate the necessary technical analysis for providing an alternative population estimate. In addition, adjustments to existing monitoring protocols for the census count will be enacted, ready for the next population assessment in May-June 2016. In addition the date of the autumn population count will be aligned between participating countries, to take place in 2016 during the mid-monthly count in November. Data collection about juvenile percentages, family status and neckband percentages will not change, taking place during the last week of October / first week of November. Sweden currently participates in counts but a more formal agreement of participation in the ISMP would be sought from the Swedish authorities', see section 2.3.

## **2.3 Development of European Goose Management Platform (EuroGMP)**

In light of recent developments relating to goose populations within Europe, there has been greater international focus on ways to address goose-human conflicts and their ecosystem impacts. These issues persist and are becoming more acute and complex as a result of increasing goose populations across Europe. Sergey Dereliev, AEWA Technical Officer and Jesper Madsen as Chair, WI Waterbird Harvest Specialist Group outlined ongoing work to develop a European Goose Management Platform. Dereliev noted that the SPfG ISMP was the 1<sup>st</sup> adaptive species management plan in Europe and had led the way in engendering international cooperation and learning. Other species management plans are now being developed but it was recognised that successful management of European goose populations requires flyway-scale decision-making processes supported by an appropriate structure to manage multiple goose species. Dereliev stated that at the 6th session of the AEWA Meeting of the Parties (MOP6), held in November 2015 in Bonn, Germany a mandate had been approved to establish a European multispecies goose management platform and process to address the sustainable use of goose populations. Dereliev outlined the proposed structure, which would require an AEWA led coordination unit, a data centre (Aarhus University) and participation by multiple range state organizations and representatives. This management structure would ensure an internationally coordinated decision-making process as well as data collation and processing e.g. of population sizes, harvest statics and derogations. Only a few selected goose species would come under the EuroGMP in a start-up phase (2016-2018), to include: the Taiga Bean, Barnacle (all three populations), Greylag (northwest European population) and Svalbard Pink-footed Goose. The establishment of the EuroGMP is still in the development stage and firm commitments and funding were currently being sought from key range states. Madsen noted that the establishment of the EuroGMP would have implications for the SPfG IWG in the long run; nevertheless the forthcoming AHM decision-making process in

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<sup>8</sup> Link to news release: <http://pinkfootedgoose.aewa.info/node/195>

2016 would remain as per the suggested timeline (see appendix 2 & 3). Madsen added that the next IWG meeting is likely to be combined with that of the Taiga Bean Goose and is envisaged taking place in December 2016.

### **Decisions**

The IWG endorsed the development of the EuroGMP and agreed to continue working to the proposed 2016 AHM decision-cycle and timeline for the pink-footed goose in the short-term. In the meantime, it was agreed that the Swedish authorities should be asked if they wished to participate in SPfG ISMP process, as pink-footed geese are increasingly occurring in Sweden alongside other goose species that will come under the EuroGMP.

### **Actions**

The Coordination Unit and AEWA Secretariat will keep the IWG informed of developments to establish the EuroGMP. AEWA Secretariat will contact the Swedish AEWA National Focal Point about participating in the SPfG ISMP process and joining the IWG.<sup>9</sup> Belgium and the Netherlands will agree between them who will offer to take the Chair of the IWG.

## **2.4 Next IWG meeting and selection of next Chair country**

As noted above, with the development of the EuroGMP, the next meeting of the IWG is likely to take place in December 2016. No specific host country, venue or date was identified. A request to act as the next Chair country was made to the Belgian and Dutch authorities.

### **Decisions**

The IWG would wait to hear back from the Coordination Unit and AEWA Secretariat about convening the next IWG meeting. No decision was taken about who would become the next Chair country of the IWG. Belgium and the Netherlands agreed to discuss between themselves who would take the Chair<sup>10</sup>.

### **Actions**

The Coordination Unit will confirm the Chair for 2016 as soon it is agreed, as well as provide details on the next IWG meeting once decided.

## **Abbreviations**

- AHM            Adaptive Harvest Management
- AEWA        African-Eurasian Waterbird Agreement
- CBA           Cost Benefit Analysis
- ISMP        International Species Management Plan
- IWG         International Working Group
- SPfG        Svalbard Pink-footed Goose

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<sup>9</sup> As of 29<sup>th</sup> January 2016 the Swedish National Focal Point had been contacted by the AEWA Secretariat.

<sup>10</sup> As of 12<sup>th</sup> January 2016 Belgium offered to take the Chair of the AEWA Pink-footed Goose International Working Group for 2016.

# Appendices

## 1) Participant list

### Norwegian delegation

**Øystein Størkersen** - National Focal Point  
Environment Agency, Ministry of Environment  
**Arild Espelien** - National Expert.  
Environment Agency, Ministry of Environment  
**Ingunn Tombre** - National Expert  
Norwegian Institute for Nature Research (NINA)  
**Endre Alstad** - Delegate.  
Norwegian Association of Hunters and Anglers (NJFF)  
**Ove Martin Gundersen** - Delegate  
Norwegian Farmers' Union (Bondelaget)  
**Lars Waade** - Delegate  
Innherred Landowners Association for Goose  
Management  
**Pål-Krister Vesterdal Langlid** - Delegate  
Advisor to Nord-Trøndelag Norwegian Farmers'  
Union (Bondelaget)  
**Paul Harald Pedersen** - Delegate  
Official of the County of Nord-Trøndelag,  
Coordinator National Working Group

### Danish delegation

**Henrik Lykke Sørensen** - National Focal Point.  
Danish Nature Agency, Ministry of Environment  
**Jesper Madsen** - National Expert & Lead  
Coordinator.  
Aarhus University / AEWA SPfG IWG Coordination  
Unit  
**Iben Hove Sørensen** - Delegate  
Danish Hunters' Association (DJ)  
**Niels Erik Jørgensen** - Delegate.  
Danish Hunters' Association

### Dutch delegation

**Annegien Helmens** - National Focal Point.  
Dutch Ministry of Economic Affairs  
**Ralph Buij**, National Expert.  
Wageningen University  
**Bob van den Brink** - Delegate  
Official of Province of Friesland  
**Fred Cottaar** - Delegate

### Belgian delegation

**Michiel Vandegheuchte** - National Focal Point,  
Government of Flanders, Agency for Nature and  
Forests.  
**Eckhart Kuijken** - National Expert.  
**Dries Desloover** - Delegate  
Flemish Nature and Forest Agency  
**Ignace Deroo** – Delegate  
Belgian Farmers' Union (Boerenbond)  
**Christine Verscheure** - Delegate,  
Natuurpunt (Birdlife International partner)

### International delegates

**Sergey Dereliev**  
African-Eurasian Waterbird Agreement (AEWA),  
UNEP/AEWA Secretariat  
**Fred A. Johnson** - Expert,  
Southeast Ecological Science Centre,  
U.S. Geological Survey  
**David Scallan** - Observer.  
Federation of Associations for Hunting &  
Conservation of the EU [FACE]  
**James H. Williams** - Coordinator.  
Aarhus University / AEWA SPfG IWG Coordination  
Unit  
**Kevin Klausen** - Expert  
Aarhus University  
**Wouter Langhout** - Observer  
BirdLife International

## 2) Annual Adaptive Harvest Management and population monitoring cycle





### 3) Proposed AHM decision-cycle and timeline for 2016

Date	Activity	Decision
25-30 April	Goose catch (marking)	
1 May	Population count	
20 May	Population assessment	Data checked by experts
31 May	Hunting bag statistics received by CU from Norway and Denmark	Data checked by experts
1 June	Snow conditions in Svalbard assessed	Data checked by experts
3 June	Annual monitoring report draft	Draft report circulated to IWG
7 June	Optimal harvest strategy updated	Draft report circulated to IWG
10 June	Comments on reports back from IWG	Comments incorporated in final drafts; IWG agreement on harvest quotas for Denmark and Norway
<b>16 June</b>	<b>Meeting Danish Wildlife Management Council</b>	Recommended harvest regulation to meet national harvest quota for the forthcoming hunting season
18 June	Danish Nature Agency implements recommendation Norwegian Environment Agency implements recommendation	Implementation of procedures for setting up regulation
30 June	Annual monitoring and harvest reports finalised and approved	Reports uploaded on DCE website

