



1st Meeting of the AEWA Svalbard Pink-footed Goose International Working Group
23 April 2013, Copenhagen, Denmark

DRAFT OF AEWA SPfG ISMP ACTIVITIES & ANNUAL WORK PROGRAMME

Introduction

The following tables and charts have been produced to outline the deliverables and timings of anticipated activities needed to implement the AEWA International Species Management Plan (ISMP) and the Adaptive Harvest Management (AHM) of the Svalbard Pink-footed Goose (SPfG); one of the key objectives specified in the ISMP.

The AEWA SPfG ISMP Activity Status Table (Table 1) details the results and actions as outlined in Table 8 of the AEWA SPfG ISMP, along with deliverables for each action based on outputs from the Implementation Meeting, held in Svalbard in August 2012. For each of these results / actions their status has been indicated and an expected completion date given. This table has been used to establish the activities outlined in the draft 2013 AHM Work Programme (Table 2). These activities are regarded as the first phase of implementation for the AEWA SPfG ISMP.

The draft 2013 AHM Work Programme: Table of Activities (Table 2) details the AHM annual monitoring, modelling and review activities, as well as giving anticipated activity dates for 2013. Although the AEWA SPfG International Working Group (IWG) opted for a three year decision making cycle, for regulating the pink-footed goose harvest, it is considered necessary that AHM monitoring, modelling and review activities are carried out annually. This is intended to facilitate learning and enable the IWG and national managers to respond to any unforeseen changes in the population's status. These activities and dates are also shown in a Gantt chart for 2013 (Figure 3). Annual work programmes and Gantt charts will be produced for subsequent years once the 2013 activities are endorsed by the IWG.

Figure 4 indicates how the annual AHM assessments fit with the current regulatory cycles for changing hunting season lengths. The next anticipated regulatory change point is for the 2014 hunting season. It is expected that any possible change will need to be proposed 1 year in advance, to enable national consultation and communication with hunting organizations prior to implementation (within DK & NO).

The IWG is invited to consider and discuss these activities and their timings to assess the feasibility in meeting deliverables and potential management impacts.

Table 1 – AEWA SPfG ISMP Activity Status Table

| No. | Results / Actions | Priority | Timeframe | Status | Expected | Deliverables | Notes | Responsibility |
|-----|--|-----------|-----------|----------------------|----------|---|---|--------------------|
| | International management capacity: AEWA SPfG ISMP | | | | | | | |
| 1 | Develop and agree adaptive management framework for the Svalbard population of the pink-footed goose (SPfG). | Essential | Immediate | Completed (May 2012) | - | AEWA International Species Management Plan for the Svalbard Population of the Pink-footed Goose (AEWA SPfG ISMP). | After an initial workshop (Dragør, Denmark, 2010) and subsequent consultation with stakeholders the ISMP was established and then endorsed by the 5th session of the AEWA Meeting of the Parties in May 2012, in France. | AU |
| 2 | Establish international management structure and working group for implementing the AEWA SPfG ISMP. | Essential | Short | Completed (Aug 2012) | - | Terms of Reference for the AEWA SPfG International Working Group (IWG) and Coordination Unit (CU) | The Meeting on the Implementation of the SPfG ISMP held in Longyearbyen, Svalbard in August 2012 established the required management structure. ToRs were agreed for the IWG and CU along with initial funding for 3 years (2013-2015). | AU |
| 3 | Develop guidelines & formats for annual reporting (e.g. AEWA SPfG IWG Annual Report). | Essential | Short | In progress | Jun 2013 | AEWA SPfG IWG Reporting Formats & Guidelines document | Draft document to be presented at 1 st AEWA SPfG IWG meeting, in Copenhagen (Apr 2013) with final reporting guidelines for SPfG IWG Annual Report (see action 33) to be published in Jun 2013. Reporting processes to be simple, online, user friendly and automated where possible. | SPfG CU |
| 4 | Develop and establish AEWA SPfG ISMP / IWG website. | Essential | Short | In progress | May 2013 | AEWA SPfG ISMP / IWG website | A dedicated website will be available to support the activities of the SPfG IWG. | AEWA. SPfG CU |
| 5 | Maintain AHM and population models. | Essential | Short | Completed (Jan 2013) | - | Contract / agreement for technical cooperation | 3 year contract / technical agreement signed between USGS (Fred Johnson) and AU to continue development and the provision of AHM and population modelling services. Long-term intention to develop capacity within Europe, maintaining close connection with USGS. | USGS, AU, SPfG CU, |

| | Hunting management capacity | | | | | | | |
|----|--|-----------|-------|-------------------------|----------------------|---|---|--|
| 6 | Develop predictive modelling tools for SPfG population and Adaptive Harvest Management (AHM). | Essential | Short | Completed (Apr 2013) | - | AHM for SPfG: Progress Summary Report | Report distributed to the AEWA SPfG IWG. | USGS, SPfG CU |
| 7 | Harvest management is optimised to maintain sustainable and stable population size. | Essential | Short | Planned | Jun 2013 On-going | 3 yr. AHM cycle with annual review | Optimisation of harvest is achieved by implementing the ISMP and the 3 yr. AHM cycle. 1 st hunting season for application of SPfG ISMP AHM is in 2013. | DNA, NDNM, SPfG IWG |
| 8 | Communication of population and AHM model results. | Essential | Short | In progress | Aug 2013 On-going | Population Status Report; AHM Report; AEWA SPfG IWG Annual Report | Results presented to IWG in annual Population and AHM Reports and subsequently publish as part of the AEWA SPfG IWG Annual Report. 1 st report due in Aug 2013 (see action 33). | USGS, AU SPfG CU, |
| 9 | Ensure international and national hunting regulations are agreed and adjusted accordingly. | Essential | Short | In progress | Jul 2013 | Hunting Regulations and Procedures document (updated tri-annually) | As part SPfG ISMP AHM process a document detailing the international coordination and means to regulate hunting will be published. Document to be updated in accordance with DK / NO regulatory cycle for changing hunting seasons (every 3 years). | DNA, NDNM, SPfG CU |
| 10 | Develop and publish Alert Action Plan. | Essential | Short | In progress | Jul 2013 | Alert Action Plan | Plan to describe emergency process and measures should AEWA SPfG IWG Annual Report indicate population status has reached a minimum threshold level (level to be agreed in consultation with SPfG IWG). | SPfG IWG, SPfG CU |
| 11 | Raise awareness and promote 'wise use' hunting & 'best practices' for the organization of SPfG hunting at national and local levels within hunting range states. | High | Short | TBC | On-going | Hunting guidelines, codes of conduct etc. Training & awareness programmes | Publication of guidelines, training programs and local codes of conduct. Specific projects and actions to be conducted within DK & NO. | AU, NINA, DNA, NDNM, DHA, NHA, SPfG CU |
| 12 | Ensure that the 'crippling rate' is kept at an agreed minimum within all SPfG hunting range states. | Medium | Short | TBC | On going | Hunting Regulation and Procedures document; Crippling Rate Report; SPfG IWG Annual Report | Minimum Crippling Rate target to be established in consultation with hunting organizations and published as part of Hunting Regulation and Procedures document, as amendment (see action 9). Regular monitoring to | DNA, NDNM, DHA, NHA, SPfG CU |

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|----|---|--------|--------|-----|-----|--------------------------------------|--|----------------|
| | | | | | | | take place and results published (see action 26). | |
| | Habitat management capacity | | | | | | | |
| 13 | Ensure human activities within range states do not adversely impact seasonal distribution pattern in areas of international importance for SPfG, e.g. land use, agricultural practises and hunting. | High | Medium | TBC | TBC | TBC | Projects and/or management actions to be identified as part of national / regional management plans (produced as needed, see action 17) and reported and evaluated as part of the SPfG IWG Annual Report (see action 33). | NFPs, SPfG CU |
| 14 | Ensure status of protected areas are maintained and enhanced, where appropriate, throughout SPfG flyway. | High | Medium | TBC | TBC | TBC | Updates on protected areas within range states to be reported and evaluated as part of the SPfG IWG Annual Report. | NFPs, SPfG CU |
| 15 | Ensure beneficial recreational activities in relation to SPfG are established and evaluated at local level (economic and cultural value). | Medium | Medium | TBC | TBC | TBC | Projects and/or management actions to be identified as part of national / regional management plans (produced as needed, see action 17) and reported and evaluated as part of the SPfG IWG Annual Report. | NFPs, SPfG CU |
| 16 | Support and actively facilitate the use of habitats and areas where there is no conflict and restore favourable habitat where desirable. | Medium | Medium | TBC | TBC | TBC | Conservation projects and/or management actions to be identified as part of national / regional management plans (produced as needed, see action 17) and reported and evaluated as part of the SPfG IWG Annual Report. | NFPs, SPfG CU |
| 17 | Develop national/regional management plans. | Medium | Medium | TBC | TBC | National / Regional Management Plans | National / regional management plans produced as needed. These will be reported and evaluated as part of the SPfG IWG Annual Report. Official documentation of national / regional plans and projects to be published and made available on the SPfG ISMP website. | NFPs, SPfG CU |
| 18 | Determine and agree on acceptable levels of tundra degradation. | High | Short | TBC | TBC | TBC | Agreement on acceptable level to be reached in consultation between NDNM and SPfG IWG. Project planned to determine extent and impact of tundra degradation (see action 28). | NDNM, SPfG IWG |

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|----|---|--------|--------|-------------|----------------------|---|--|--------------------------|
| 19 | Develop Tundra Alert Action Plan. | High | Medium | TBC | TBC | Tundra Alert Action Plan | Action plan to address arctic tundra degradation, if considered outside acceptable levels (see action 18) | NDNM, SPfG IWG |
| 20 | Develop national/local management plan for SPfG breeding on mainland Norway. | Medium | Medium | TBC | TBC | National / Regional Management Plan | Produce document detailing measures to prevent SPfG breeding on mainland Norway. | NDNM, SPfG IWG |
| | Monitoring capacity | | | | | | | |
| 21 | Maintain regular monitoring & observations of geese in range states outside the breeding grounds. | High | Medium | In progress | On-going | AEWA SPfG IWG Annual Report | Details and guidelines will be outlined in the Monitoring Requirements and Processes Report (see action 22). Results to be published in SPfG IWG Annual Report (see action 33). | BE, NL, DK, NO. SPfG CU, |
| 22 | Produce Monitoring Requirements and Processes Report. | High | Medium | In progress | Jun 2013 | Monitoring Requirements and Processes Report | Document detailing all monitoring and reporting requirements to be undertaken throughout SPfG flyway. | SPfG CU, |
| 23 | Produce Population Estimate and Status Report. | High | Medium | In progress | Jun 2013 On-going | Produce Population Estimate and Status Report. | Report detailing SPfG population estimate, status and dynamics. Published annually (June). Results also included in SPfG IWG Annual Report (see action 33). | AU |
| 24 | Produce Survival Estimate and Status Report. | High | Medium | In progress | Jan 2014 On-going | Survival Estimate and Status Report (scientific manuscript) | Initial report to be produced in Jan 2014 and subsequently every 3 years. Report based on annual 'marking & re-sighting' monitoring. Results to be published, when updated, in SPfG IWG Annual Report (see action 33). | AU |
| 25 | Collect and publish annual hunting bag statistics. | High | Medium | In progress | On-going | AEWA SPfG IWG Annual Report | DK & NO annual harvest data to be collated by SPfG CU and reported in SPfG IWG Annual Report (see action 33). Guidelines for providing this data will be detailed in the Monitoring Requirements and Processes Report to be published in Jun 2013 (see action 22). | DNA, NDNM, SPfG CU |
| 26 | Monitor proportion of SPfG population carrying shotgun pellets in tissue (Crippling Rate monitoring). | Medium | Short | In progress | On-going | Crippling Rate Report AEWA SPfG IWG Annual Report | Regular monitoring of crippling rate undertaken in DK, geese x-rayed as part of capture programme in March. Results reported periodically and to be included in SPfG IWG Annual Report, | DNA, AU, SPfG CU |

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|----|--|-----------|--------|-------------|----------|------------------------------|--|---------------------|
| | | | | | | | when available (see action 33). | |
| 27 | Monitoring of agricultural conflicts. | Medium | Medium | TBC | TBC | TBC | Limited data is available on the extent of agricultural conflicts in the range states. National monitoring schemes / data to be collated and assessed by the SPfG IWG. | NFPs, SPfG CU / IWG |
| 28 | Arctic tundra monitoring. | High | Short | Planned | Dec 2013 | Arctic Tundra Habitat Report | Habitat and vegetation survey of arctic breeding grounds in Svalbard. Project to design determine extent and impact of tundra degradation. Monitoring program has been funded (Svalbard Environmental Fund); field work to be conducted in summer 2013; report to be prepared by end of 2013. | AU, NINA, NPI |
| | Review & evaluate | | | | | | | |
| 29 | Evaluate effects of national policies and subsidy/compensation schemes and alternative non-consumptive management actions to minimise agricultural conflicts at regular intervals. | Medium | Medium | TBC | TBC | AEWA SPfG IWG Annual Report | Evaluations undertaken by relevant national authorities. Any updates and results reported periodically and included in SPfG IWG Annual Report, when available (see action 33) | NFPs, SPfG CU |
| 30 | Periodic review of relevant international / national policy initiatives likely to impact PFG migration pattern. | High | Medium | TBC | TBC | AEWA SPfG IWG Annual Report | Assessment undertaken as necessary. Any updates and results reported periodically and included in SPfG IWG Annual Report, when available (see action 33) | NFPs, SPfG CU |
| 31 | Evaluate ISMP actions on distribution and SPfG population size. | High | Medium | TBC | TBC | AEWA SPfG IWG Annual Report | Publication of arrival and departure dates, seasonal numbers at national/regional levels. Guidelines for providing this data will be detailed in the Monitoring Requirements and Processes Report (see action 22). Results reported in SPfG IWG Annual Report, when available (see action 33). | SPfG IWG / CU |
| 32 | Review and dissemination of technical aspects of AHM and population predictive models. | Essential | Short | In progress | Jul 2013 | 2x peer reviewed manuscripts | Two manuscripts are to be submitted for peer review and publication in academic journals. These will describe the development of these models and their optimization. The IWG has been invited to give comments. | USGS, SPfG CU |

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|----|--------------------------------------|-----------|-------|-------------|-------------------|-----------------------------|--|-------------------|
| 33 | Produce AEWA SPfG IWG Annual Report. | Essential | Short | In progress | Aug 2013 On-going | AEWA SPfG IWG Annual Report | Annual report collated by SPfG CU with information provided from various sources. Format and guidelines for this report and information required to be specified (see action 3). 1 st report to be published in Aug 2013, available on ISMP / IWG website and distributed nationally by IWG National Focal Points (NFPs). | SPfG CU, SPfG IWG |
|----|--------------------------------------|-----------|-------|-------------|-------------------|-----------------------------|--|-------------------|

Abbreviations

AU = Aarhus University
 DHA = Danish Hunters' Association
 DNA = Danish Nature Agency
 NDNM = Norwegian Directorate of Nature Management
 NHA = Norwegian Hunters' Association
 NINA = Norwegian Institute for Nature Research
 NFPs = National Focal Points (head of the delegation for each country represented within the AEWA SPfG IWG)
 NPI = Norwegian Polar Institute
 SPfG CU = Svalbard Pink-footed Goose Coordination Unit
 SPfG ISMP = Svalbard Pink-footed Goose International Species Management Plan
 SPfG IWG = Svalbard Pink-footed Goose International Working Group
 USGS = U.S. Geological Survey

BE = Belgium
 NL = The Netherlands
 DK = Denmark
 NO = Norway
 TBC = to be confirmed

Key: The Priority of each result / action is given, according to an evaluation of what is needed to deliver the fundamental objectives of the AEWA SPfG International Species Management Plan: Essential; High; Medium; Low.

The Time scales attached to each Activity use the following criteria:

- Immediate: completed within the next year
- Short: completed within the next 1-3 years
- Medium: completed within the next 1 – 5 years.

Table 2 - 2013 AHM Work Programme: Table of activities

| Activity | Short description | Start Date | Duration | End Date | Responsibility |
|---------------------------------------|---|------------|----------|------------|----------------|
| Population Monitoring | | | | | |
| Population count (autumn) | Population census conducted in BE, NL, DK and NO | 01/11/2013 | 5 | 06/11/2013 | AU |
| Population count (spring) | Population census conducted in DK and NO | 01/05/2013 | 5 | 06/05/2013 | AU |
| Population Estimate & Status Report | Annual report detailing SPfG population status and dynamics | 30/05/2013 | 3 | 02/06/2013 | AU |
| Survival estimation (marking) | Capture of geese in DE for marking, measurement and crippling monitoring | 12/03/2013 | 3 | 15/03/2013 | AU |
| Survival Estimate & Status Report | Report produced <i>every 3 years</i> based on annual 'marking & re-sighting' observation monitoring. | 31/12/2013 | 3 | 03/01/2014 | AU |
| DK hunting bag deadline | Date hunters expected to submit hunting bag data (post and on-line) | 01/04/2013 | 3 | 04/04/2013 | DNA |
| NO hunting bag deadline | Date hunters expected to submit hunting bag data (on-line) | 01/05/2013 | 3 | 04/05/2013 | NDNM |
| Hunting Bag Report | Annual hunting bag report combining DK and NO data | 31/05/2013 | 3 | 03/06/2013 | AU |
| Danish wing survey | Hunters post 'bird wings' to AU to determine proportion of species in DK hunting bag data | 15/09/2013 | 121 | 14/01/2014 | AU |
| Danish Wing Survey Report | Annual report | 31/05/2013 | 3 | 03/06/2013 | AU |
| Crippling rate monitoring | Geese x-rayed as part of capture in March | 12/03/2013 | 3 | 15/03/2013 | AU |
| Arctic tundra monitoring | Habitat and vegetation survey of arctic breeding grounds in Svalbard | 01/08/2013 | 10 | 11/08/2013 | AU, NINA |
| Snow cover estimate (Tempdays) | Record of days in May in with mean temperature >0°C (proxy for snow conditions on the breeding grounds) | 26/05/2013 | 5 | 31/05/2013 | AU, NINA |
| Tempdays Report | Annual report on weather covariate used in population models | 01/06/2013 | 3 | 04/06/2013 | AU, NINA |
| Population productivity estimate | Estimated from flock observations and counts. Results communicated within Estimate & Status Report | 10/10/2013 | 20 | 30/10/2013 | AU |
| Population & AHM Modelling | | | | | |
| Supply data | Data collated and sent to USGS to update population and harvest optimization models. | 04/06/2013 | 5 | 09/06/2013 | SPfG CU |
| Analyse data | Annual data analysis and modelling | 09/06/2013 | 20 | 29/06/2013 | USGS |
| Preliminary AHM Report | Report on population status and impact of AHM actions, with recommendations for any changes. | 29/06/2013 | 7 | 06/07/2013 | USGS |
| Review | Report sent for review by SPfG IWG and distribution to relevant agencies by NFPs. | 06/07/2013 | 10 | 16/07/2013 | SPfG IWG |

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|---|---|------------|----|------------|--------------------|
| Revision | Feedback collated and incorporated in to report and its recommendations. | 16/07/2013 | 7 | 23/07/2013 | USGS |
| Final AHM Report | Final AHM Report produced, sent to SPfG CU and distributed to SPfG IWG | 23/07/2013 | 3 | 26/07/2013 | USGS |
| Annual AEWA SPfG AHM Review | | | | | |
| Preparation AEWA SPfG IWG Annual Report | Compilation of SPfG Annual Report, distributed for review to SPfG IWG | 01/08/2013 | 10 | 11/08/2013 | SPfG CU |
| AEWA SPfG IWG meeting / contact | Virtual / on-line meeting for final discussions on SPfG IWG Annual Report and recommendations | 11/08/2013 | 3 | 14/08/2013 | SPfG CU |
| Publish AEWA SPfG IWG Annual Report | SPfG IWG Annual Report and recommendations published on SPfG ISMP website and disseminated within range countries by NFPs | 14/08/2013 | 7 | 21/08/2013 | SPfG CU & IWG NFPs |

Figure 3 - 2013 AHM Work Programme: Gantt chart

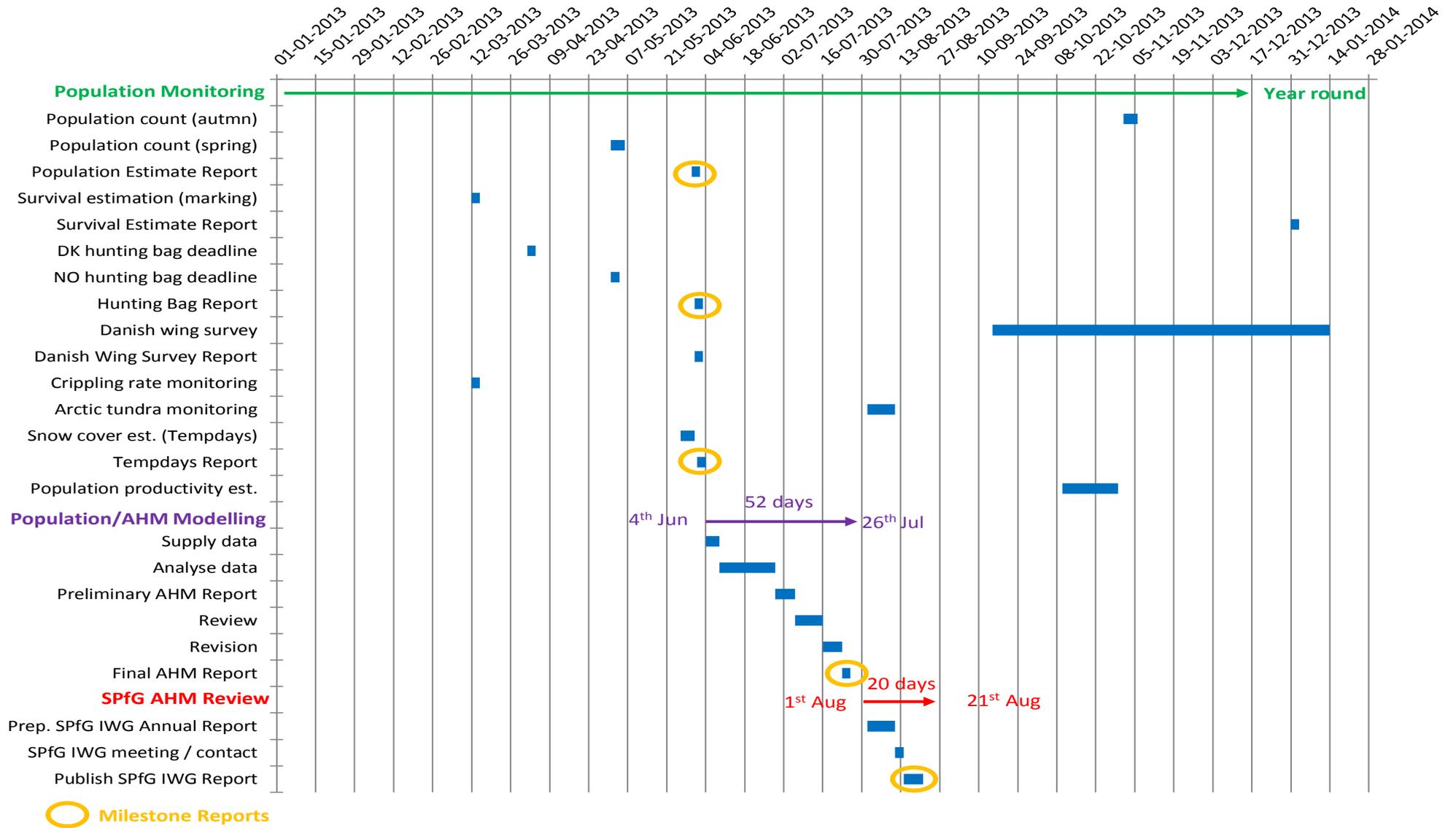


Figure 4 - SPFG ISMP Adaptive Harvest Management: 3 Year Decision Cycles

