

GOOSE BULLETIN

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GOOSE BULLETIN is the official bulletin of the Goose Specialist Group of Wetlands International and IUCN.

GOOSE BULLETIN appears as required, but at least once a year in electronic form. The bulletin aims to improve communication and exchange information amongst goose researchers throughout the world. It publishes contributions covering goose research and monitoring projects, project proposals, status and progress reports, information about new literature concerning geese, as well as regular reports and information from the Goose Database.

Contributions for the **GOOSE BULLETIN** are welcomed from all members of the Goose Specialist Group and should be sent as a Word-file to the Editor-in-chief. Authors of named contributions in the **GOOSE BULLETIN** are personally responsible for the contents of their contribution, which do not necessarily reflect the views of the Editorial Board or the Goose Specialist Group.

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Editorial

In front of you you have the 20th issue of the Goose Bulletin, which was scheduled to appear in May 2015, but alas it was not to be, because the editorial board did not receive enough manuscripts. And even now, we can only offer you a small issue, with very few manuscripts.

The Goose Specialist Group of Wetlands International and the IUCN-Species Survival Commission was founded to strengthen contacts between all researchers and volunteers interested in migratory goose populations of the northern hemisphere. Furthermore, the group has a strong focus on the database of goose censuses, which is maintained by a network of national co-ordinators.

One of the tools to maintain and strengthen contacts between all stakeholders was the production of a group newsletter. The first newsletter was named “IWRB Goose Research Group Newsletter” and appeared during 1989-1990 in three issues, followed between 1991 and 1995 by the “IWRB Goose Research Group Bulletin” with six issues and the “Wetland International Goose Specialist Bulletin” in 1996 with two issues. After a gap of 13 years the newsletter was revived in 2009 with GOOSE BULLETIN 9 and up to now, we managed to produce a total of eleven issues of the GOOSE BULLETIN.

But this becomes more and more difficult, because of the lack of manuscripts!

The GOOSE BULLETIN is the newsletter of the Goose Specialist Group and should provide a mechanism for the members to communicate news, reports and views, as well as to inform the other members of the group about what they are doing, announcing projects, initiatives and meetings. Furthermore, the editorial board is keen to take short scientific notes and articles that, whilst they might not be quite good enough for submission to major journals, may be of general interest to other group members.

In recent decades the numbers of most goose species in Northern America and Europe have increased or have been more or less stable. Many species have shifted from winter feeding on wetlands (swamps and wet grasslands) to foraging on agricultural habitats and as a result have caused conflict with farming. In contrast, many goose populations in East Asia (and especially in China) still feed on natural and semi-natural habitats and show decreasing trends. In Northern America and Europe the main goose issues are associated with limiting population growth and reducing goose damage for some goose populations whereas for other populations in Europe and most populations in the Eastern Palearctic focus falls on how to stop population declines. We have a lot of questions and can only find answers, if we co-operate. It is the task of the Goose Specialist Group to maintain a network of goose researchers to communicate data, ideas, questions and knowledge, hold regular GSG-meetings as well as produce a GOOSE BULLETIN as a platform for knowledge exchange within the group.

The editorial board only can produce a GOOSE BULLETIN as long as you send material and manuscripts!

The next issue of the GOOSE BULLETIN is planned to appear in May 2016, which means that material for this issue should have reached the editor-in-chief not later than the 31st of March 2016.....but earlier submission is, of course, always permitted, if not actively encouraged!

The Editorial Board

IUCN-SSC Goose Specialist Group (GSG) 2014 report

Dr. Barwolt S. Ebbinge (Chair)

Name of Co-Chair: Petr M. Glazov (Co-chair)

State of the GSG

Chair: Barwolt S. Ebbinge, retired senior researcher of the Dutch institute Alterra Wageningen UR is currently based in Wijk bij Duurstede, the Netherlands, and

Co-chair: Petr M. Glazov, researcher, based in Moscow, Russia affiliated with Institute of Geography Russian Academy of Sciences.

The GSG currently has 624 members

Mission of the GSG

The Goose Specialist Group of IUCN Species Survival Commission and Wetlands International seeks to strengthen contacts between all researchers on migratory goose populations in the northern hemisphere. Apart from regular meetings a digital newsletter “Goose Bulletin” is prepared twice a year. See www.geese.org/gsg

Summary of main activities in 2014

In 2014 the 16th meeting of the Goose Specialist Group of Wetlands International and the IUCN-Species Survival Commission (GSG) was held from 22-25 November in Beijing, China. The meeting attracted 116 delegates from 15 different countries and it was the third meeting of the Goose Specialist Group in Asia (Matsushima, Japan in 1999 and Ladakh, India in 2008).



Conference picture of the participants of the 16th GSG-meeting in front of the RCEES-building.

Apart from the host country China (represented by 77 participants), 49 delegates attended the meeting from 14 other countries, including the Russian Federation (11), Mongolia (3), Japan (5), South Korea (1), India (1), Australia (1), USA (1), England (2), Denmark (1), Norway (2), the Netherlands (6), Belgium (3), Finland (1) and Germany (1).

The meeting was very well organized on behalf of the GSG by the team of Prof. Cao Lei from Research Center for Eco-Environmental Sciences of the Chinese Academy of Sciences (RCEES).

Although most goose populations in North America and Europe are thriving, and in the case of some species are even considered to be “too numerous”, in China, goose populations have seriously declined, which is therefore a matter of concern. An impressive photo exhibition on the theme of “waterbirds and wetlands” illustrated the wealth of waterbird species in East Asia.

During the three days of the conference, delegates listened to 43 oral presentations in English, 1 in Mongolian and 1 in Chinese, together with 7 poster presentations. These presentations illustrated our current knowledge of goose populations in East Asia as well as highlighting our knowledge gaps, and how to fill these gaps with new research and new research techniques, including logging devices combined with triaxial accelerometers that both track the geese in space and time and simultaneously record their behaviour throughout the annual cycle.

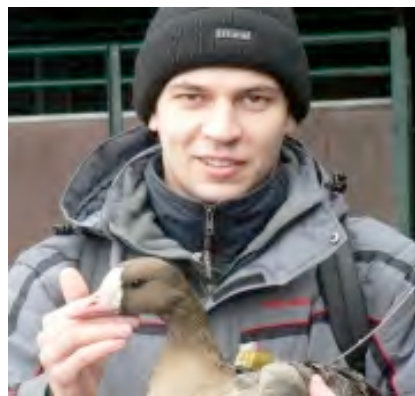
To make an inventory of the technical problems that can occur with the increased and fascinating use of transmitters and loggers to study bird migration, Thomas Lameris and Petr Glazov initiated a special working group, to share the current knowledge on tagging of geese, and to create a platform for good tagging practices, such as the use of back-packs, implanted transmitters, neck-collars or legbands.

Further subjects covered in the programme included the degree to which migratory geese are involved in spreading avian influenza, impacts of climate change on the breeding success of Swan Geese, poaching with nets and poison, the role of ecotourism and the status of various East Asian goose populations (notably Swan Geese, Bar-headed Geese, Bean Geese, White-fronted Geese and Lesser White-fronted Geese) were discussed at length.

It was also encouraging to note the results of good co-operation between Chinese universities and the universities in Aarhus (DK) and Wageningen (NL) studying goose behaviour on Chinese wintering grounds.



Bartwolt S. Ebbinge
Chair of the GSG



Petr M. Glazov
Co-Chair of the GSG

Judit Szabo from the East Asian-Australasian Flyway Partnership, Liying Su from the International Crane Foundation, Nina Mikander from the African Eurasian migratory Waterbird Agreement (AEWA) and Peter Prokosch with his new project “Linking tourism and conservation” (www.ltandc.org) all contributed their experiences of working in partnerships and their ideas for the future to fruitful group discussions.

Petr M. Glazov from Moscow was appointed as co-chair of the GSG. He is a very active goose researcher, and a regular attendant of the GSG-meetings. Petr Glazov will gradually take over the responsibilities of the present Chair Bart Ebbinge.

After the conference a field trip to the largest freshwater lake in China, Poyang Lake, was organized. Here the participants witnessed no less than 4 different species of cranes (Siberian Crane *Leucogeranus leucogeranus*, White-naped Crane *Grus vipio*, Hooded Crane *G. monacha* and Eurasian Crane *G. grus*), hundreds of Greater White-fronted Geese *Anser albifrons*, several thousands of Eastern Tundra Bean Geese (*A. fabalis serrirostris*), hundreds of just arrived Swan Geese *A. cygnoides*, thousands of Oriental Storks *Ciconia boyciana*, hundreds of Eurasian Spoonbills *Platalea leucorodia*, over 10,000 Tundra Swans *Cygnus columbianus* feeding on *Vallisneria*, 800 roosting Night Herons *Nycticorax nycticorax*, tens of thousands of Little Grebes *Tachybaptus ruficollis* and similar numbers of Spotted Redshank *Tringa erythropus*, by far the most common wader species around this impressive lake, though also hundreds of Lapwings *Vanellus vanellus* were observed.

It was impressive to see how in a fast developing country like China with an excellent infrastructure of roads and airports, still many arctic-nesting wild birds can spend the winter undisturbed on this protected wetland.

The 16th meeting of the GSG was supported financially by the National Natural Science Foundation of China, BirdLife International and the Dutch Faunafund.

Important upcoming activities

The 17th meeting of the GSG.

Yevgeniy Syroechkovskiy and Sofia Rozenfeld invited the GSG to hold the 17th meeting in November/December 2015 in Salekhard, Russia jointly with the Russian Goose, Swan and Duck Study Group of Northern Eurasia. During this joint meeting it is planned also to hold a workshop of the Anatidae Working Group of the East Asian-Australasian Flyway Partnership (EAAFP). This invitation was unanimously accepted by the participants of the 16th meeting of the GSG.

The Organizing Committee of the conference “Waterfowl of Northern Eurasia: Research, conservation, and sustainable use” has created a special website with information on the conference <http://onlinereg.ru/Salekhard2015> (pages “Hotel accommodation”, “How to get to Salekhard”, and “Post-conference excursions”).

The conference deadlines: submission of proposals for organizing symposia, special workshops and round tables – April 01, 2015; abstract submission – May 01, 2015.



Improving knowledge about Greylag Geese in France

Summary of the research program

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A major research programme on Greylag Geese was carried out from 2011 to 2014 at the request of the French Ministry of Environment, Sustainable Development and Energy and has deepened our knowledge of the northwestern European population of Greylag, a species of highly favourable status in Europe.

Thanks to the bird counts carried out under the coordination of Wetlands International in mid-January, it is clear that the northwestern European population of Greylags continues to grow. The most recent estimate from 2012 suggested a minimum of 700,000 individuals, close to 60 % of which occur in the Netherlands. Such an increase is evident in all countries of range of this population (most recently in Sweden) although with a notable, maybe temporary, decrease in Spain in the last 3 years.



The analysis of ringing and marking data (neck collars) and ring recoveries in the databases from EURING and the French Museum of Natural History (CRBPO) confirms the general Nordic origin of the birds observed and/or shot in France: most come from Norway, Sweden and Denmark. Very few of the controlled/recovered birds come from the Netherlands. The resightings of marked birds in Camargue show these birds mostly originate from the central European population, particularly from the Czech Republic. These results have also demonstrated some exchange of individuals between the northwestern European and central European populations. The resightings in France of birds marked elsewhere support these findings.

In France, the numbers of wintering Greylags have followed the general trend in the northwestern European population, with a significant increase until 2009. Wintering numbers in France have stabilized around 20,000 birds in January since that date. Three major sites host half of the population annually: Baie de l'Aiguillon-Pointe d'Arçay, Lac du Der-Chantecoq and the Camargue. The number of geese wintering in France remains low compared to other countries from the same flyway. The proportion of the total population that winters in France has seldom fluctuated over the last years (2.9 % on average since 1997), in accordance with the general northwards shift of the wintering range.

The results of the three years of study in France show return migration to begin in the third 10-day period of January, with a migration peak during the second 10-day period of February for the East-Atlantic flyway, as already observed in earlier studies conducted over a longer time period. The 15 geese fitted with GPS/GSM tags during winter in Spain initiated their return migration from mid-February, which is consistent with the migration peak observed in France. These birds hence seem to be representative of the migration behaviour of Spain-wintering Greylags.

Despite the disparity and small size of the dataset for the autumn migration, the general pattern seems to be for the first flights to be observed during the third 10-day period of September each year. Migration is essentially visible from mid-October to the end of November, with variable peaks depending on years (fluctuating more or less by one 10-day period), likely dependent on changes in short-term weather conditions.

In Spain, the counts suggest a possible decline of the wintering population since 2010. The decrease is most pronounced in Doñana National Park, the main Spanish wintering site for Greylag geese, as well as in Villafafila, likely due to weather conditions, fluctuating flooding regimes and habitat changes. However, the global patterns suggest a general northward shift of the wintering range which may also contribute.



The monitoring of GPS/GSM-tagged geese captured during winter in the Doñana National Park and in Extremadura have revealed different migratory movements, both in space and time, in particular with flights over the Gulf of Gascogne during spring migration, a phenomenon previously unknown. Several migratory stopovers of 2-3 days to 1 month are recorded in Spain, France and the Netherlands. The data confirm the preferential use of the East-Atlantic flyway between Spain and the Netherlands. The return journey between the Spanish wintering sites and the breeding grounds lasts ca. 2 months.

The data from birds tagged in the Czech Republic at the end of the spring have shown much inter-individual differences in migration trajectories, as well as multidirectional intermediary movements during winter proper.

The geese tagged in Norway after the breeding season moved southwards from August onwards, half of these having wintered in the Netherlands and in northern Germany.

Knowledge about hunting bags and other numbers killed by other means of culling remains highly patchy at the scale of the north-western European population. In particular, gaps in knowledge remain in France, Spain and Portugal. As a consequence, it is difficult with current available information to precisely assess the impact of hunting mortality on this Greylag Goose population.

Reference

SCHRICKE, V. (2011): A new research project: Improving the knowledge on Greylag Goose in France. - GOOSE BULLETIN 13: 13-16.

ONCFS (2014): Amélioration des connaissances sur l'oie cendrée en France. - Rapport final, novembre 2014, 74 p.



Does the proportion of Snow Geese using coastal marshes in southwest Louisiana vary in relation to light goose harvest or rice production?

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Introduction

In historical wintering areas along the Gulf of Mexico, Lesser Snow Geese *Chen caerulescens caerulescens* (hereafter Snow Geese) currently use two primary habitats, i.e., coastal marshes and adjacent agricultural lands north of the marshes. Snow Geese wintered only in coastal marshes until the 1940s; however, they began using agricultural lands, predominantly those planted with rice *Oryza sativa* (hereafter rice-prairies), within the last 80 years (BATEMAN et al. 1988). These two habitats differ in foraging conditions, which results in differing time budgets for Snow Geese (JÓNSSON & AFTON 2006). The relative costs and benefits in terms of food intake can vary annually for these two habitats in relation to weather or food availability (ALISAUSKAS 1998, ALISAUSKAS et al. 1988, 1998, JÓNSSON & AFTON 2006, JÓNSSON et al. 2014).



Snow Geese from coastal marsh habitats (both banded birds and collected specimens) have larger bills than do those from rice-prairies (ALISAUSKAS 1998, JÓNSSON 2005, JÓNSSON et al. 2014). ALISAUSKAS et al. (1998) suggested that the two morphs could represent separate populations, requiring separate management.

Prior to the application of the U.S. Conservation Order (ALISAUSKAS et al. 2011), there was some concern in Louisiana that the marsh Snow Geese would be particularly vulnerable to the increased harvest efforts expected from the Conservation Order.

Despite the morphological segregation, Snow Geese occasionally move between the two habitats, although movements generally are rare (ALISAUSKAS 1998, JÓNSSON et al. 2014). Movement decisions by Snow Geese may depend on which habitats offer greater safety from hunters or disturbance. We previously argued that Snow Geese are relatively safer from hunters in coastal marshes, wherein most Snow Geese are found within large waterfowl refuges (JÓNSSON et al. 2014). Furthermore, the habitat suitability of rice-prairies could be affected by annual variation in rice production, i.e., increased rice production probably increases food availability for Snow Geese in rice-prairies (JÓNSSON et al. 2014).

Although movements between habitats can be frequent for short time periods, the morphological segregation may persist for decades because exchange between the two habitats can be restricted over longer time-scales. Thus, annual changes in relative Snow Goose numbers between the two habitats can plausibly occur over a period of a decade or more. Here, our objective was to determine whether the annual proportion of Snow Geese using coastal marsh habitats in southwest Louisiana varied annually, as compared to rice-prairie habitats, possibly in relation to hunting pressure or rice production. We predicted that: 1) increased rice production would make rice-prairies more attractive for Snow Geese and thus, the proportion of Snow Geese using coastal marshes would be inversely correlated with rice acreage in Louisiana; and 2) increased light goose harvest and hunting pressure would favour an increased proportion of Snow Geese using coastal marshes.

Methods

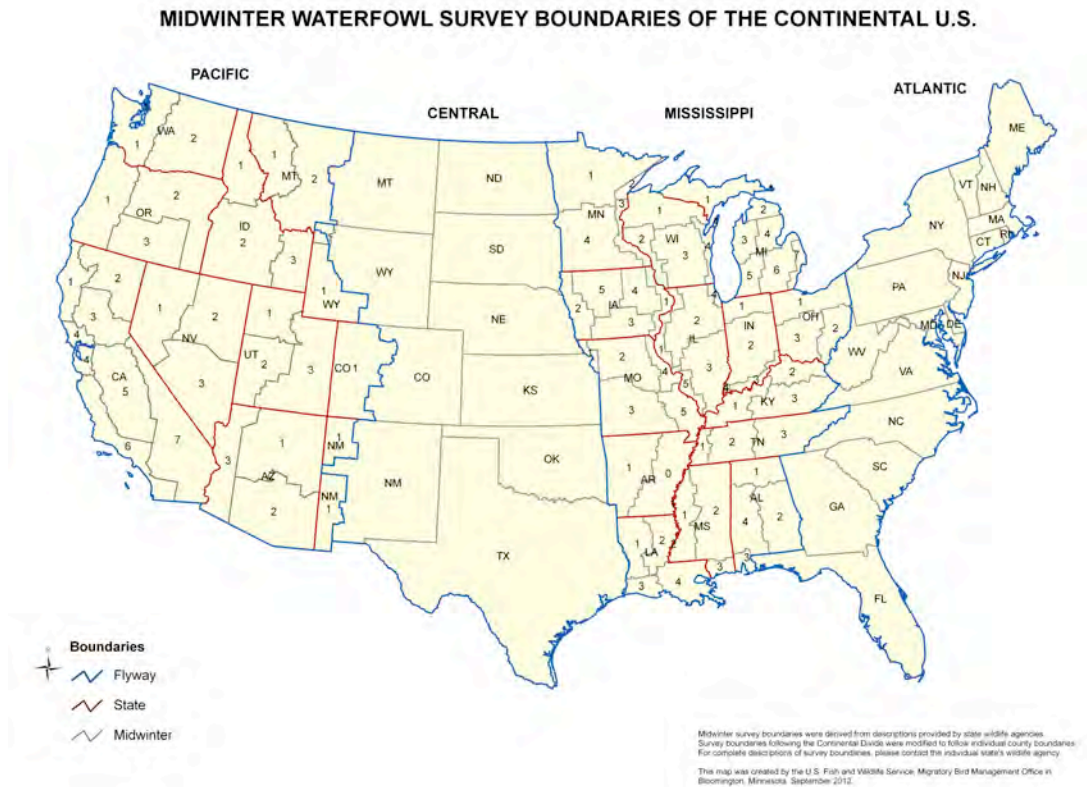
In North America, both harvest and waterfowl winter survey estimates are combined for Snow Geese and the closely related Ross's Geese *C. rossii*, and the two species are jointly termed light geese by waterfowl managers (KRUSE & FRONCZAK 2014). We obtained light goose numbers from the annual mid-winter waterfowl survey (EGGEMAN & JOHNSON 1989; SHARP et al. 2002, U.S. FISH & WILDLIFE SERVICE 2015). In southwest Louisiana, the survey is carried out by staff of U.S. Fish and Wildlife Service (USFWS) and Louisiana Department of Wildlife and Fisheries (LDWF) in the first week of January.



The response variable

We used 14 years (2001-2014) of mid-winter waterfowl survey results and stratified data by winters for all analyses; winters were defined by January (the survey month) for the given calendar years representing the annual variation in this study. We stratified light goose numbers in southwest Louisiana (zone 3, see map below) from the mid-winter survey into the two habitats: rice-prairies (Survey units 1, 3, 6, 7, and 12 of Zone 3) or coastal marshes (Survey units 2, 4, and 5 of Zone 3; see Fig. 1 in JÓNSSON et al. 2014 and survey coverage maps in U.S. FISH & WILDLIFE SERVICE 2015).

We then calculated the proportion of light geese using coastal marshes (PCM) from the mid-winter survey results and used this proportion to index annual Snow Goose use of coastal marsh habitat. Preliminary analysis showed that PCM was not correlated to light goose numbers in southwest Louisiana (survey numbers for zone 3 only), or to the state-wide total light goose numbers (survey numbers for zones 1, 2, 3 and 4 combined). Accordingly, we used PCM as the response variable in our analyses.



Explanatory variables and relevant assumptions

We included rice acreage and a hunting pressure index as explanatory variables in our analyses to examine our predictions. We examined annual variability in rice production using total rice acreage in Louisiana (Rice Online; United States Department of Agriculture 2014). We chose total light goose harvest in Louisiana (KRUSE & FRONCZAK 2014) as an index of hunting pressure in our analysis, which we examined previously in relation to total hunted days and hunter numbers, i.e. regular season harvest plus conservation order harvest within each winter (JÓNSSON & AFTON 2015). We initially considered the approach of PÖYSÄ et al. (2013): ranking the winters according to harvest rate (total light goose harvest / state-wide light goose numbers). However, both the harvest rate itself and ranking the winters by the harvest rate were correlated with total light goose harvest. We also considered the approach of SZYMANSKI et al. (2013), who used hunter numbers for grouping regions into low and high hunting pressure; however, hunter numbers consistently declined for Louisiana during 2001-2014 (KRUSE & FRONCZAK 2014). Thus, we chose to use total light goose harvest as our index (see also JÓNSSON & AFTON 2015).

For our analysis, we assumed that:

1. annual variation in rice production in all of Louisiana represented annual variation in rice production within our study area in southwest Louisiana (which also is the “heartland of Louisiana’s rice belt”; BABINEAUX 1967);
2. the January mid-winter survey for light geese in southwest Louisiana represented Snow Goose distribution between habitats; there are known limitations to the surveys which are discussed by EGGEMAN & JOHNSON (1989); and
3. that total light goose harvest was a reasonable index for hunting pressure (JÓNSSON & AFTON 2015).

For light goose harvest, annual state totals were the only available data; separate harvest estimates for southwest Louisiana were not available. Thus, we evaluated our second assumption by inspecting relationships between winter and light goose harvest with respect to: 1) state-wide totals (light goose numbers summed for waterfowl survey zones 1, 2, 3 and 4 in Louisiana); and 2) light goose numbers for zone 3 only, which corresponds to southwest Louisiana (U.S. FISH & WILDLIFE SERVICE 2015).

Relevant questions were: 1) whether light goose numbers in southwest Louisiana were correlated with the state-wide total; and 2) whether the state-wide total light goose numbers was related to winter or total light goose harvest in Louisiana. However, we found no relationships in any of the three cases (Appendix 1).

The observed annual trends in light goose numbers state-wide and specifically for southwest Louisiana were similar, suggesting that using state-wide total harvest vs. survey numbers specific to southwest Louisiana was reasonable for our analysis. Our second assumption appears justified after examining Snow Goose distribution among the four survey zones within Louisiana. Southwest Louisiana (zone 3) contained on average 49% of all Snow Geese in Louisiana during 2001-2010 (10 year average). By comparison, north Louisiana (zones 1 and 2) contained 46.4% of all Snow Geese in Louisiana but those zones are inland and have no adjacent coastal marshes. We surmise that similar events were occurring throughout the south coast of Louisiana because the state total was our hunting pressure index. The only other survey zone within Louisiana with coastal marshes is southeast Louisiana (zone 4) and on average 25-30 thousand Snow Geese (4.6% of state-wide total) were surveyed there annually from 2001-2010, or approximately ten times fewer than the number of Snow Geese using southwest Louisiana. Thus, Snow Geese in southeast Louisiana probably play a limited role in affecting state-wide PCM, relative to that of those in southwest Louisiana.



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Statistical analysis

We used a generalized mixed linear model to examine the effect of three explanatory variables on proportions of Snow Geese using coastal marsh habitats from 2001-2014. Specifically, our explanatory variables were total light goose harvest (our index of hunting pressure, thousands of birds) and rice acreage in Louisiana (thousands of acres/year) but we also included winter as a random effect, which accounted for annual variation:

1) The proportions of Snow Geese that used coastal marshes (PCM) = $\beta_0 + \beta_1(\text{total light goose harvest in Louisiana}) + \beta_2(\text{rice acreage in Louisiana}) + \text{winter (random effect)}$

Finally, we also ran a model where effects of rice acreage and light goose harvest in Louisiana on PCM were lagged by one year in case Snow Geese chose between coastal marshes and rice-prairies based on their experiences in the previous winter rather than the current winter.

Results

After accounting for winter as a random effect, we found that PCM was inversely related to total light goose harvest in Louisiana ($F_{1,11} = 9.60$, $P=0.01$), but was not related to rice acreage in Louisiana ($F_{1,11} = 0.10$, $P=0.76$).

The proportion of Snow Goose using coastal marshes increased during the study period (Fig 1) and was inversely related to total light goose harvest (Fig 2). We observed no 1-year lagged effect of rice acreage ($F_{1,10} = 0.29$, $P=0.60$) or total light goose harvest ($F_{1,10} = 3.31$, $P=0.10$) on PCM.

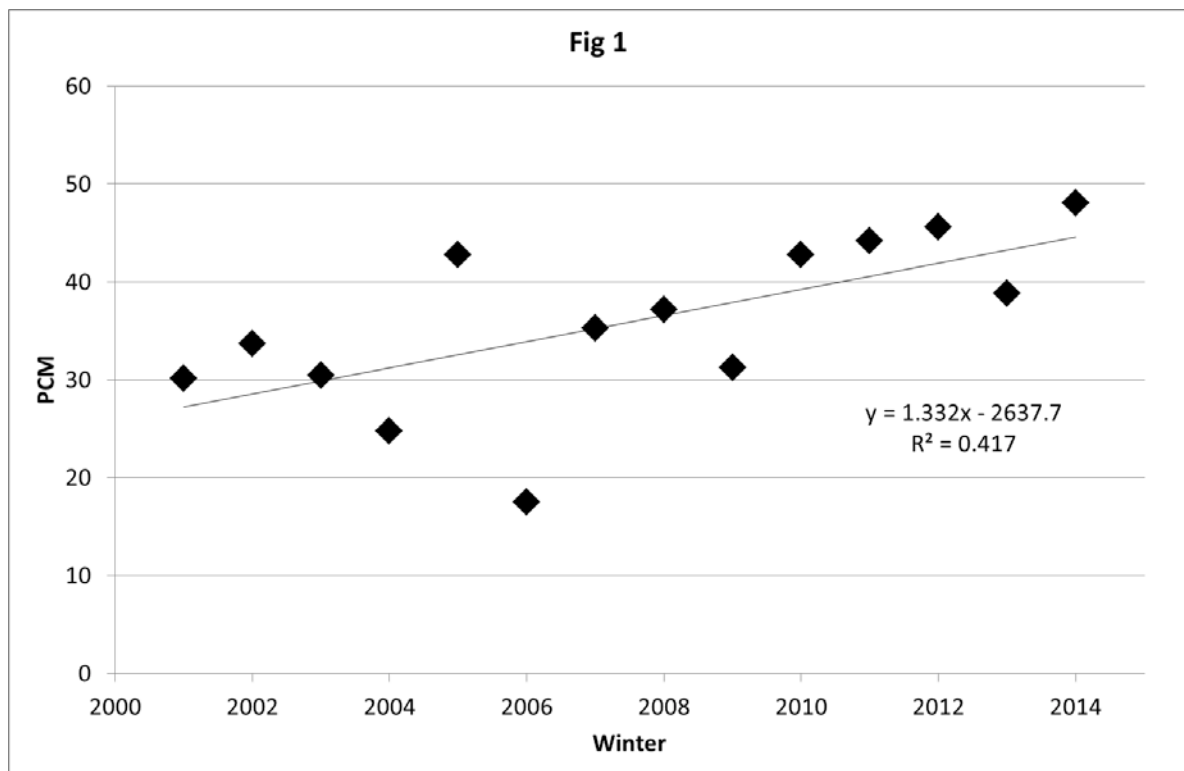


Fig. 1. The annual trend in proportion of Snow Geese in southwest Louisiana using coastal marsh habitat (PCM), calculated from midwinter waterfowl survey data from 2001-2014. The relationship shown is a simple linear regression of the two variables; the generalized linear model reported in the text included a winter effect as a random effect.

Total light goose harvest in Louisiana decreased through the study period and was particularly low (<65,000 birds) in 2010-2011 and 2013-2014 (Fig 3).

Rice acreage in Louisiana fluctuated over the study period but did not show a linear trend with winter (Fig 3); it was relatively high, 455-550,000 acres 2001-2005, decreased to 360,000 acres in 2006 but increased then on until 2010 towards a peak of 560,000 acres. From 2010 onwards, rice acreage in Louisiana ranged relatively low at 402,000-455,000 acres.

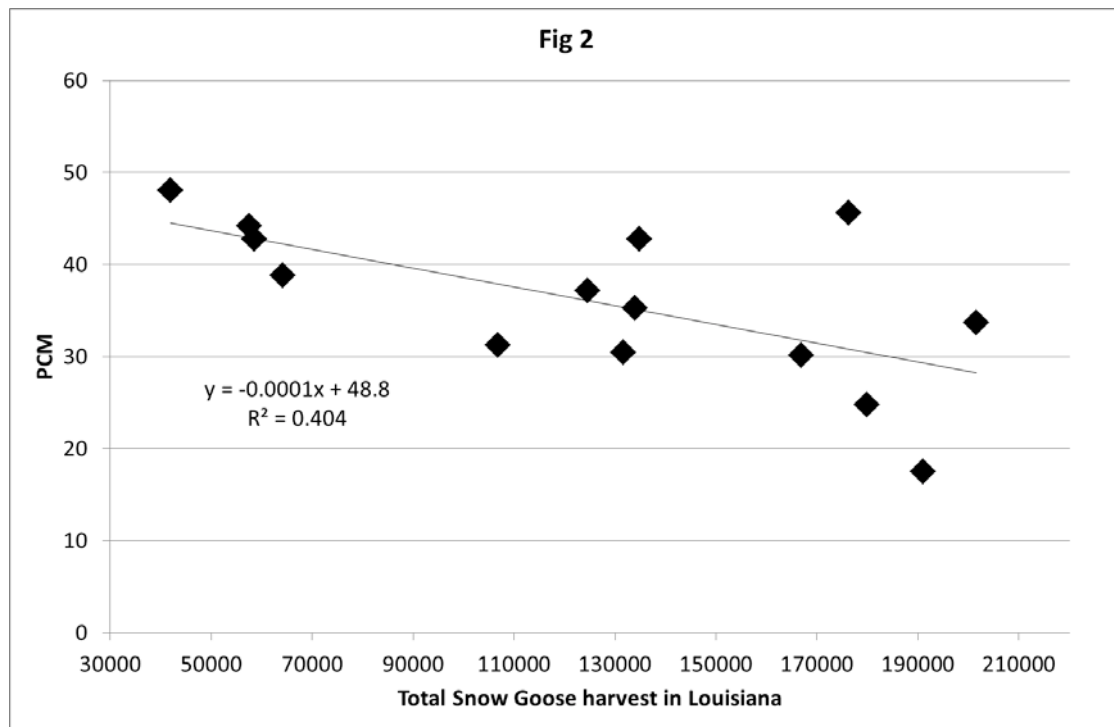


Fig. 2. The relationship between the proportion of Snow Geese in southwest Louisiana using coastal marsh habitat (PCM) and total light goose harvest, our index of hunting pressure. The relationship shown is a simple linear regression of the two variables; the generalized linear model reported in the text included this effect as a fixed effect which was significant after including the random winter effect shown in Fig. 1.

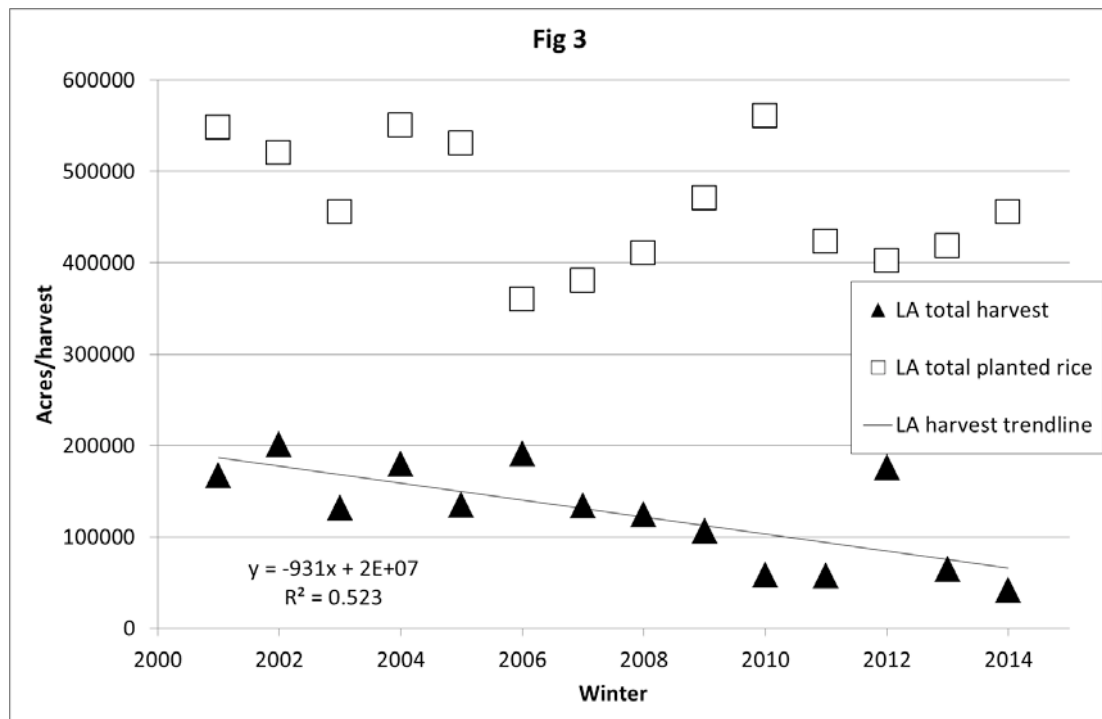


Fig. 3. Planted rice (acres) in Louisiana (open symbols) and total light goose harvest (solid symbols) from 2001-2014. Both variables use the same y-axis. There was no linear trend in rice acreage, whereas light goose harvest declined during the study period.

Discussion

Contrary to our prediction, we observed an inverse correlation between PCM and light goose harvest in Louisiana. A possible explanation for this finding is that the high observed use of marsh by the Snow Geese 2010-2014 (see Fig. 1) could have contributed towards a lower light goose harvest, rather than hunting pressure in the rice-prairies favouring high use of coastal marshes. Notably, there was no decline in state-wide total harvest in Arkansas, Missouri, Nebraska, South Dakota or North Dakota in 2001-2013 (JÓNSSON & AFTON 2015). Thus, our hunting pressure index showed no trend in the other major Snow Goose hunting states in the flyway, whereas in Louisiana, Snow Geese have been under decreased hunting pressure, while simultaneously showing no trend in state-wide Snow Goose numbers.

Our prediction about the effects of rice acreage also was not supported, neither for direct effects (lag=0), nor did Snow Geese seem to use the experience from the previous winter to choose between habitats (lag=1). Although there was no relationship between rice acreage and the proportion of Snow Geese using coastal marshes, we note that the largest annual changes in total light goose harvest and PCM occurred during a low rice acreage period during 2010-2014. Rice acreage has increased in the states north of Louisiana since 2000, which probably attracts Snow Geese to areas such as the Mississippi Alluvial Valley (MAV). However, there was no trend in the numbers of wintering Snow Geese in Louisiana during this study, while the total continental Snow Goose population increased 2001-2014 (ALISAUSKAS et al. 2011). We previously argued that northwards expansion of wintering Snow Geese was explained by an exploratory, younger segment of the population (JÓNSSON & AFTON 2015), which probably would be the bulk of the Snow Geese expanding the wintering range northwards.

Marsh burns attract Snow Geese to coastal marshes to feed (JÓNSSON et al. 2014). Coastal marsh refuges generally are burned according to a 3-year rotating program, with one-third of refuge areas burned during a single fall/winter (October–February) season (GABREY & AFTON 2000). Unfortunately, we have no data on coastal marsh burns during our study period but we suspect that PCM would be positively correlated to frequency or extent of marsh burns.

Our estimate of PCM is derived from a single waterfowl survey each January, whereas Snow Geese generally arrive in southwest Louisiana in November (JÓNSSON 2005). Thus, events in early winter (November and December) could have affected distributions of Snow Geese in January, when surveys were conducted. For example, hunting disturbance or food depletion during early winter in the rice-prairies (ALISAUSKAS et al. 1988) could favour high marsh use in January. Specifically, direct mortality from hunting, frequent disturbance, and food depletion in the rice-prairies could have forced movements into the coastal marshes by the time Snow Geese are surveyed in January. A more rigorous study with estimates of PCM throughout winter is required to determine relationships between events within each habitat and their role in determining PCM.

Disturbance (FOX & MADSEN 1997, NEWTON 1998, SZYMANSKI et al. 2013), as defined by FOX & MADSEN 1997: is “any human activity that constitutes a stimulus (equivalent to a predation threat) sufficient to disrupt normal activities and/or distribution of waterbirds relative to the situation in the absence of that activity”.

Snow Geese are more accessible from roads in the rice-prairies than in coastal marshes (JÓNSSON et al. 2014), which results in relatively higher disturbance in rice-prairies. Disturbance includes hunting activities, but also other human activities that flush geese, such as human presence, hazing, noise, traffic, aircraft, boats, etc. (FOX & MADSEN 1997, NEWTON 1998). Furthermore, there is a temporal component, i.e., hunted species are more sensitive during hunting seasons than during non-hunting seasons and a spatial component, i.e., disturbance causes birds to avoid certain areas and seek other areas where they are less likely to be disturbed (NEWTON 1998). Total harvest, harvest rates or hunter numbers do not quantify or incorporate the disturbance elements of hunting pressure, i.e. effects of hunter traffic, flushing or the noise from the shooting. We suspect that these phenomena generally are more common in the rice-prairies than the coastal marshes.

Excessive hunter disturbance causes Snow Geese to form larger flocks and the associated increased flock vigilance makes Snow Geese less vulnerable to hunters (ALAN AFTON and PAT KEHOE, pers. obs). Such disturbance of Snow Geese probably declines initially as number of hunters decline. With fewer hunters in an area, Snow Geese are flushed and spooked less often and stay in smaller flocks. Smaller flocks are more easily lured into decoy sets and approach decoy sets faster, closer and at lower altitudes (ALAN AFTON and PAT KEHOE, pers. obs); thus, decreasing number of hunters could increase harvest rather than decreasing it in the long term. For example, the year 2012 had similar light goose harvest as 2001-2008 with less than half the hunters present (Appendix 2). Hunters can vary how often they hunt and how long they hunt. We suspect that with fewer hunters present, those remaining are either better or more experienced hunters, who go hunting more often when Snow Geese are in smaller flocks. Thus, Snow Geese could become vulnerable with reduced hunter numbers, if the effect of fewer hunters results in smaller and more dispersed Snow Goose flocks.

By definition, both light goose harvest and midwinter waterfowl surveys provide estimates that are combined totals for Snow Geese and Ross's Geese. In southwest Louisiana, Ross's Geese are not found in the coastal marshes but frequently flock with Snow Geese in the rice-prairies (JÓNSSON & AFTON 2009). Snow and Ross's Goose populations increased in tandem, continent-wide during the study period (ALISAUSKAS et al. 2011) and thus, we surmise that number of Ross's Geese in our study area would not greatly affect the comparisons presented here. Ross's Geese were 4-10% of all light geese in Louisiana 2001-2002 i.e. 24,000-48,000 individuals (HELM 2003); this proportion probably is higher in the rice-prairies in winters of high use of coastal marshes by Snow Geese.

So why have marshes become more important recently for Snow Geese, as indicated by midwinter waterfowl surveys? ALISAUSKAS et al. (1998) argued that coastal marshes could be important in some years for Snow Geese that ordinarily would not winter there. The high use of coastal marshes in 2010-2014 could be the beginning of changed habitat use for Snow Geese in southwest Louisiana. This period also was characterized by low light goose harvest and low rice acreages, both of which could increase marsh use by Snow Geese. After an all-time low in 2006, PCM increased from 35% in 2007 to 48% in 2014, during a period where light goose numbers in southwest Louisiana and state-wide remained stable. Thus, changes in bird numbers did not push Snow Geese into the marshes. The increasing use of marsh habitats by Snow Geese warrants further attention, especially in relation to light goose harvest in Louisiana.

Acknowledgements

We thank Larry Reynolds, Randy Wilson, Dave Fronczak, Tom Edwards, Fred Roetker and Barry Wilson for help in accessing mid-winter survey data. We also thank Kyle Brehe and Barry D. Keim for help in accessing climate data, and Kammie Kruse for providing information and data on light goose harvest. Michael D. Kaller, a statistician with the Louisiana State University Dept. of Experimental Statistics, provided advice on statistics and dependencies of variables. We thank Pat Kehoe, Ray Alisauskas, Frank Baldwin, Bobby Cox, and Jim Leafloor for a stimulating discussion on hunter activity and Snow Goose hunting. We thank Mike Szymanski for his comments on an earlier draft of this manuscript. Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

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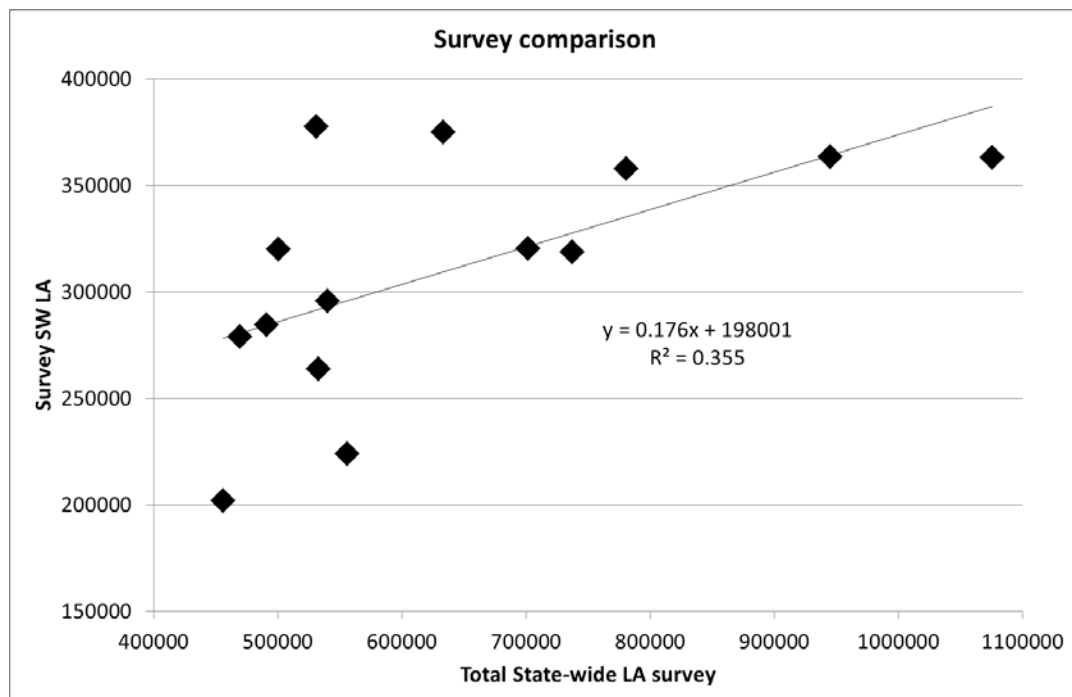
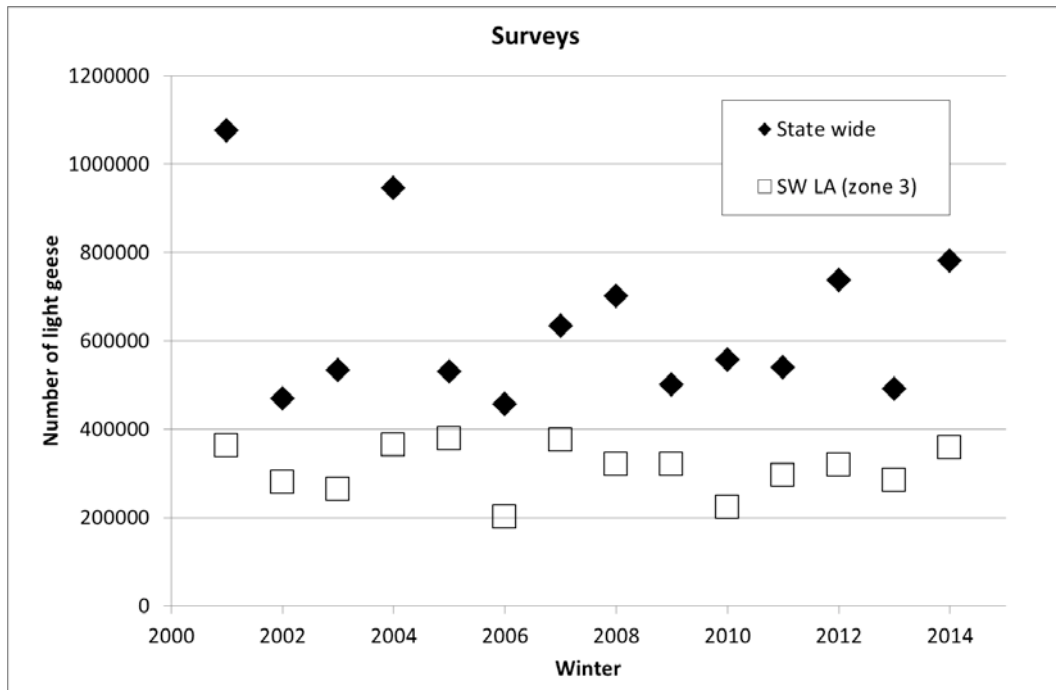
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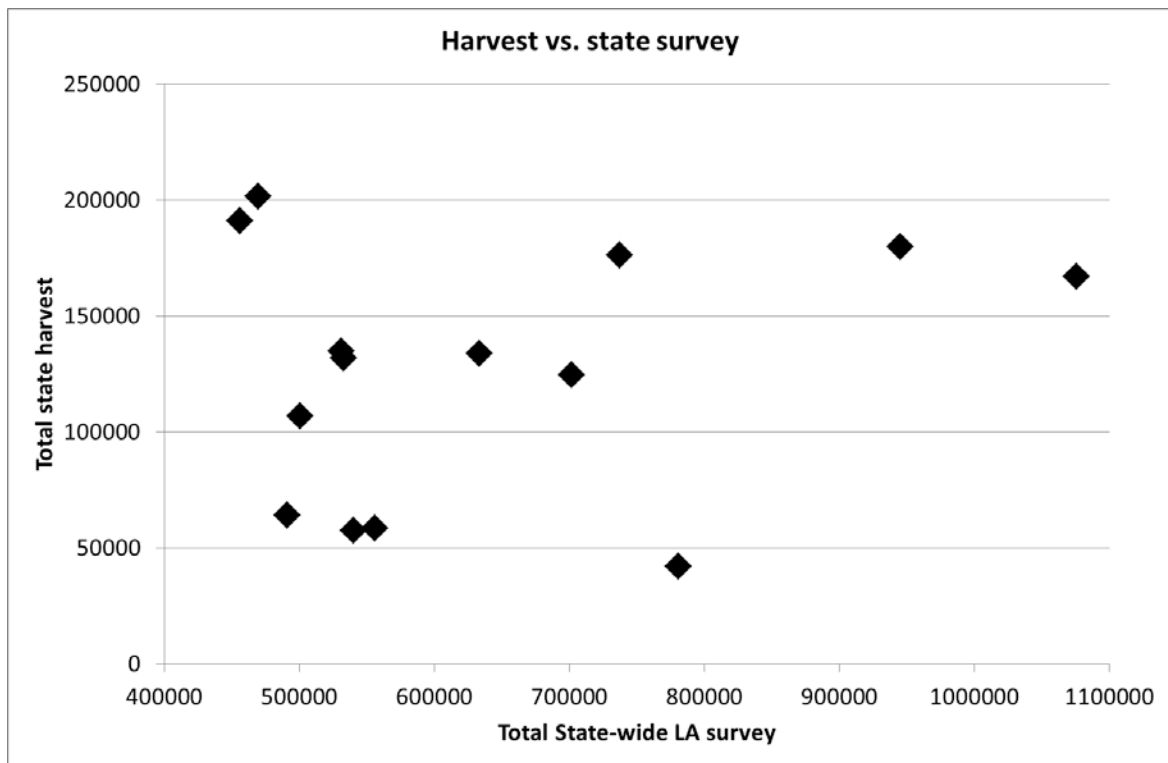
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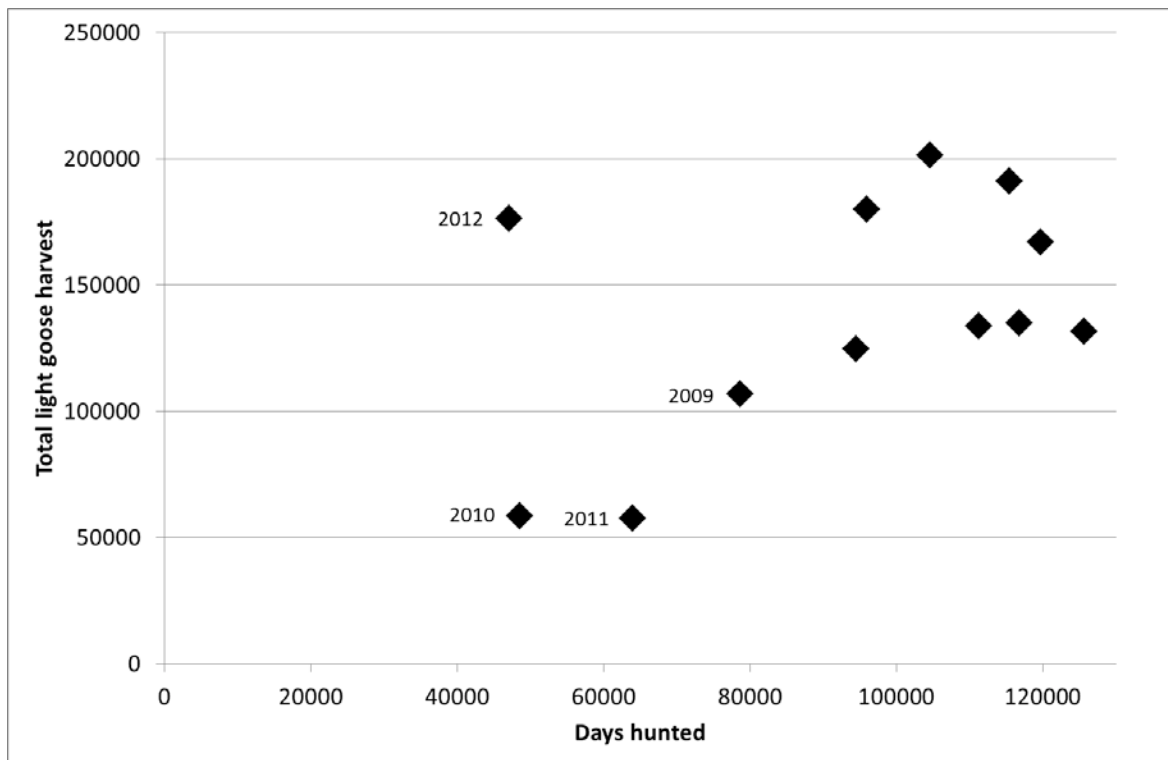
Snowgoose (Alphéraky 1904)

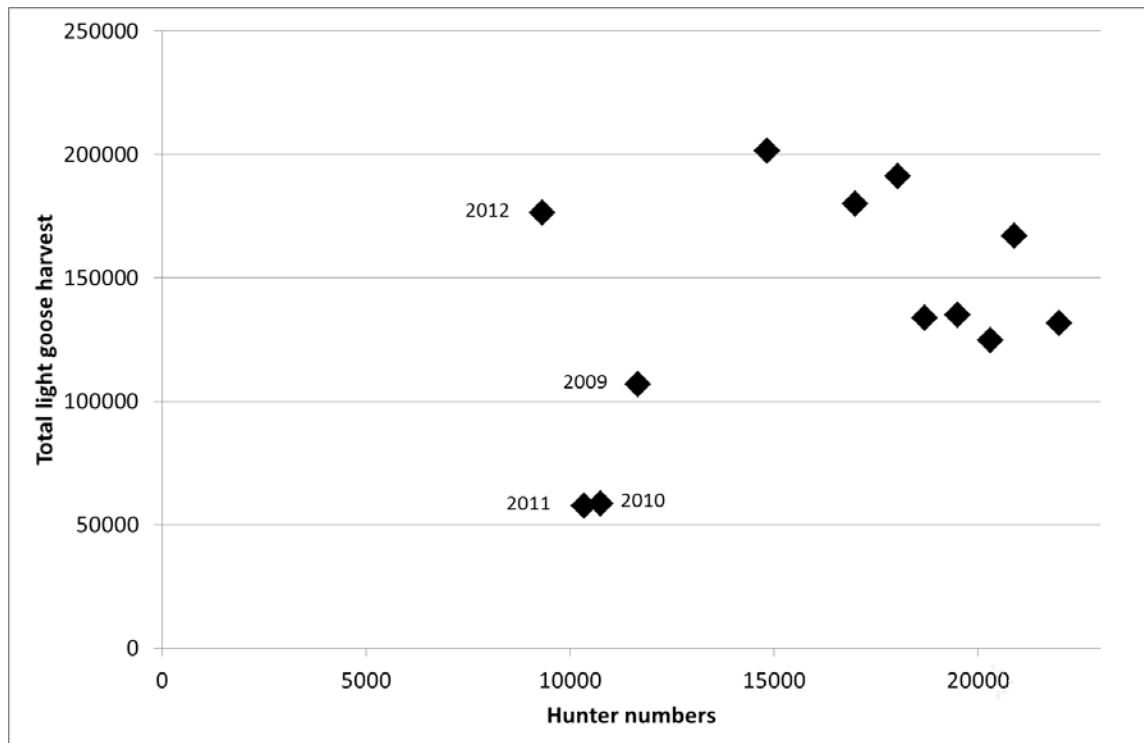
Appendix 1. Examination of state-wide and southwest zone Snow Goose numbers from the midwinter waterfowl survey for Louisiana from 2001-2014, in relation to winter (top panel), survey numbers in southwest Louisiana (middle panel) and total light goose harvest (bottom panel). There was no year trend in state-wide Snow Goose numbers or survey numbers for southwest Louisiana (top panel), a weak positive correlation between state-wide light goose numbers and light goose numbers for southwest Louisiana ($R^2=0.355$, middle panel) and no relationship between state-wide light goose numbers and state-wide light goose harvest (bottom panel).





Appendix 2. Interrelationships of total light goose harvest, with total days hunted (top panel) and hunter numbers (bottom panel) for Louisiana 2001-2012 (data from Kruse & Fronczak 2014). Total light goose harvest has no relationship to total days hunted or hunter numbers. All three parameters were low in 2009-2012 (these years are labeled).





Geese.org – blue sky and black clouds

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Introduction

Geese.org offers easy reporting and instant feedback to observers of marked geese and swans. For the people that fitted the markers to these birds, this means more sightings and better research. More observations per marker also improves the cost-benefit relationship from an animal research ethics perspective; an increasingly important issue in wildlife research. With a slightly improved version recently launched, the future of Geese.org looks just bright. But is it?



The Geese.org concept builds upon the cooperation between three categories of players: the observer/reporter, the researcher who marks the birds and the website/database provider. If any of these partners drops out, Geese.org is no more. Clear roles, mutual respect and full transparency are paramount for sustainable cooperation within this triad. Observer status needs upgrading

The homepage of the Geese.org website expresses a welcoming attitude to observers. Unfortunately most of the rest does not. In particular the “Disclaimer”, a bureaucratic text with vague and confusing terminology, makes for depressive reading for observers. Although the text says “Observers can ... provide geese.org administrators the right to use their entered observations.”, this provision of rights is *a priori* overruled by the agreement observers have to accept when they want to use Geese.org. The message seems to be: *Give us your data, and we will use it whatever way we want.* In our opinion, this “Disclaimer” is a disgrace for Geese.org. Instead, this text, and the rest of the webpage, should express true appreciation for the contribution of the observers of marked birds.

Another essential component of observer acknowledgment is their right to withdraw observations. Currently, this is explicitly forbidden. In a landscape of trust and cooperation, there would be no need to prevent reporters from changing their minds. Obviously, an observer cannot undo the use of his/her contribution to the database *in retrospect*, but a ban on withdrawal is a provocative slam in the face of a vital partner.

Too much top-down

The founders and developers of Geese.org have done a great job and deserve full credit for their contribution. Unfortunately, the webpage and the “contracts” between management and the projects breathe an atmosphere of strong top-down control. This is not a sustainable way to treat partners, and we have difficulties understanding why this should be needed or wanted by management.

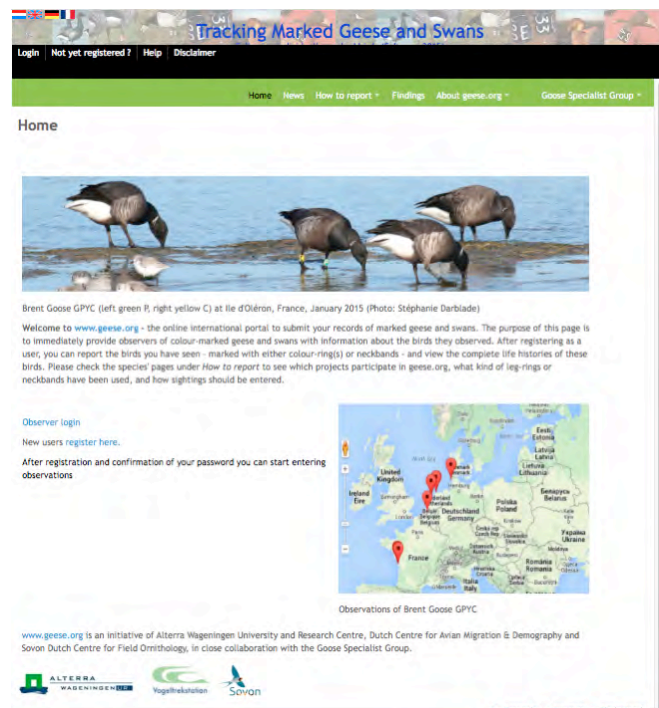
In what can be seen as a democratic move, Geese.org management has announced an “advisory board” which will be open to “all project coordinators” (e-mail 15 of June 2015). If this advisory board is allowed to play a real role in the development of Geese.org, this would be a great step forward. It could contribute significantly to transparency and an improved “power-balance” within the triad.

Economic problems ahead?

We have no insight in the funding situation of Geese.org, but based on insight in other report systems, we assume that Geese.org has to continuously raise funds for further development and maintenance. This generates a number of important questions, e.g.: Will the system continue to be free of charge for species projects or do these have to pay their share in the future. Gain sponsors any rights to the data? How important will the sale of data to external and/or commercial “customers” be? More transparency and an open discussion would reduce, or even avoid economic turbulence.

“Projects” and data-ownership

Being a researcher/project-leader ourselves, the position of this third category of the Geese.org-triad interests us most. We make the observations, storage and analyses possible! When reading through the webpage, the “contracts” and the e-mails sent out by Geese.org management, we get really confused and worried about the use of the word “project” and its implications. Legally, a project is a collection of actions based on a plan agreed upon by one or several partners. We run several Bean Goose research and conservation projects, financed by various funding agencies. In these projects, responsibilities and ownership of the generated data are clearly regulated by law and contracts, as it is throughout academia, business and (serious) NGOs. These cannot be overruled by Geese.org policy.



Obviously, Geese.org embraces another interpretation of the word “project”. Many of the projects in Geese.org differ from the type of projects described above in two important ways. First, they have no legal status and no contract/agreement to rest upon. Many of them are declared, initiated and run by single or small groups of individuals. This means that there is no stable organization that takes responsibility for the actions, quality and future of the project; just those individual(s). Secondly, these projects tend to be excluding by nature, by explicitly or implicitly claiming monopoly over species and/or territory. This excluding attitude becomes a problem when these projects try to hold back other initiatives and, particularly, when the monopolizing “project” claims (sole) ownership rights over data from other projects.

Instead, Geese.org ought to be utterly clear about the non-exclusive role of “projects”, thus welcoming any new marking initiative. Most importantly, project leaders *sensu stricto* must be the prime owners of all the data relating to birds marked within their project, and thus, have the final say about who and for what purpose these data can be used. The way it is now, several projects are reluctant or even unwilling to join Geese.org.

To put it bluntly: Data-sharing agreements? Yes! Concealed confiscation? No!



No Species coordinators wanted!

Geese.org uses a truly confusing mix of terminology when it comes to projects and their leadership: “project-coordinators”, “coordinators of ringprojects”, “project-coordinators of color ring projects”, “project leaders” and “project owners”. Please, bring out the broom. To this mishmash of terminology, Geese.org adds the “Species coordinator” function. Species coordinators are given a superior position over all projects of “their” species and have administrative and ownership rights over all the data concerning marked individuals of that species. So far, we have not been able to find out “Why” and “How” these Species coordinators were assigned with such a central task by Geese.org. We strongly suggest that Geese.org skips assigning “Species coordinators” on non-democratic grounds. Instead, Geese.org should ask existing projects for each species if they want a Species coordinator, and if they do, let the projects assign a person and a mandate to this function. Administrative rights over the Geese.org database should follow this new organisational order, while taking data security issues into account.

What about the geese?

Data-dissemination is central in the Geese.org concept. In theory, we fully support this concept, but there are cases when the making public all the data of individual birds must be questioned.

Disclosing locations of breeding or moulting sites can be potentially highly harmful for geese in populations with unfavourable or uncertain conservation status.



For Bean Geese, the place of marking often reveals a permanent moulting site. We know that birdwatchers and eco-tour operators visit known moulting sites, and these visits are likely to cause significant disturbance. For this and similar reasons, observation report systems (e.g. Artportalen) apply rules for classifying potentially harmful data. So why does Geese.org not follow suit?



And what about the future?

Observers like smooth reporting and full access to life histories, but they do **not** like to log in into multiple reporting systems. In Sweden and Norway, many sightings of marked geese are still reported **only** to regular observation portals, despite several years of heavy promotion of Geese.org. Obviously, the hassle of going to another database outweighs the instant feedback reward given by Geese.org. For researchers, this means searching multiple databases for “missing” sightings. For Geese.org to survive, smooth links to relevant observation databases are urgently needed. Also, an isolated life in “geese-and-swans-only paradise” isn’t sustainable. Many birdwatchers regularly observe individually marked birds of a variety of taxa, and thus, have to wander multiple report paths. In the long run, an excellent Geese.org isn’t good enough. Instead, a holistic international observation report system is badly needed! This is where the future is, with or without a role for Geese.org.

To sum up: *Geese.org is a cool piece of research infrastructure with lots of potential, but without a thorough reconsideration of the organisational concept and a solid long-term plan, it risks to be washed away by heavy storms rather soon.*



10 years geese.org celebrated with a new version

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The geese.org website has been operational since 2005. Since then, more than 2.000 observers have contributed over two million observations of 13 species of geese and swans through this successful website. Nearly every day, new observers start to use geese.org and the number of records is still growing fast. All observations are stored in the geese.org database, which also holds the ringing data of almost 120.000 individual birds.

The website serves three important purposes: it provides observers with instant feedback on the individual birds they have seen, including life-histories and maps, it provides ringers and project coordinators with large numbers of observations of ‘their’ birds that help them carry out further analyses, and, last but not least, the geese.org database functions as a long-term repository where colour-ring data is stored safely for future use. In this sense, geese.org both serves observers on a long-term basis, in providing feedback when projects have ceased, while at the same time data that is much needed for further goose or swan research remains available for analysis.



New version of geese.org

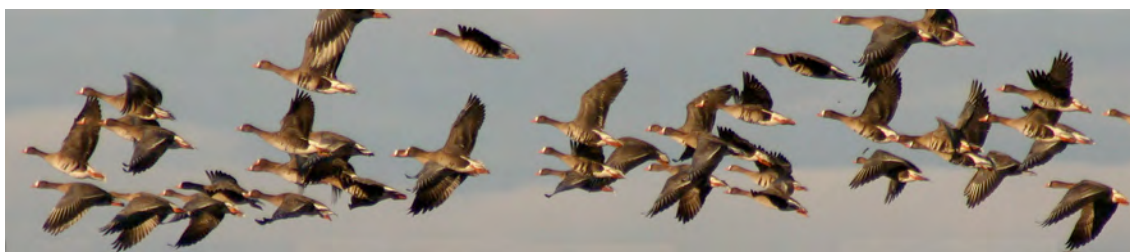
In the summer of 2015, a new version of geese.org has been launched. New functionalities include multi-species data entries and much more comprehensive information about the different colour- ring schemes. For each species an overview of all used colours and codes is presented, along with information how to report them in geese.org. Especially for less-experienced ring readers this will cause fewer errors when entering data.

New is also that for observations of birds from ringing schemes that do not participate in geese.org (yet), a warning will appear when entering codes from those schemes. Data can still be entered though, but in the life-histories, no ringing data will be presented. In a second step, also possibilities for species-managers to select and retrieve data for further analysis on their birds will be expanded. Furthermore, the geese.org website is now also the official portal of the IUCN-SSC and Wetlands International *Goose Specialist Group* and provides relevant information to its 600 members (e.g. downloads of issues of the GOOSE BULLETIN).

Management of geese.org

Being originally established by Alterra Wageningen University and Research Centre, geese.org is now jointly managed by Alterra, Sovon - Dutch centre for field ornithology and the Dutch centre for avian migration and demography of NIOO-KNAW. This collaboration ensures the long-term continuation of the website since all three parties have committed themselves to run geese.org. An Advisory Board with representatives of Aarhus University, project owners, and observers will be installed to ensure long-term involvement of these groups in discussions on strategic matters. The website is built by Alterra, where the server is hosted and technical support is provided to project owners and observers.

Financial support for the website comes from the three managing parties, and from Aarhus University, La Fondation François Sommer, pour la Chasse et pour la Nature, the Dutch Bij12 Faunafund and contributions of other sponsors. Sponsoring will remain important for the future development of the website and to maintain necessary technical support to users.



Management of projects

Project owners that contribute to geese.org with ringing data and observations hold all rights to these data and remain owner of ringing data and observations that they provided. Participating projects vary from small colour-ringing studies run by volunteers to very large and long-term projects supervised by universities or other research institutions. The three managing parties of geese.org aim to increase the use of data on colour-ringed geese and swans in the geese.org database for scientific research purposes, including research for third parties. In each case, however, project owners need to give their consent before their data can be used in such projects, and geese.org and the project owner(s) will negotiate the exact terms of the collaboration, including authorship on publications and sharing of incomes from contracts with third parties. By joining the geese.org community, project owners benefit from the increased exposure of their data and can be involved in research projects that may otherwise not be within their reach. With this information, we hope to have clarified the concerns raised by De Jong and Aarvak, elsewhere in this issue. We believe that the steadily increasing number of participating projects and observations in geese.org proves the shared enthusiasm and trust established between project owners and observers.

Not yet familiar with geese.org? Have a look at www.geese.org and register today to enter your observations. If you run a colour-ring project and are thinking of joining geese.org, contact Ralph Buij (see email below) for more information.



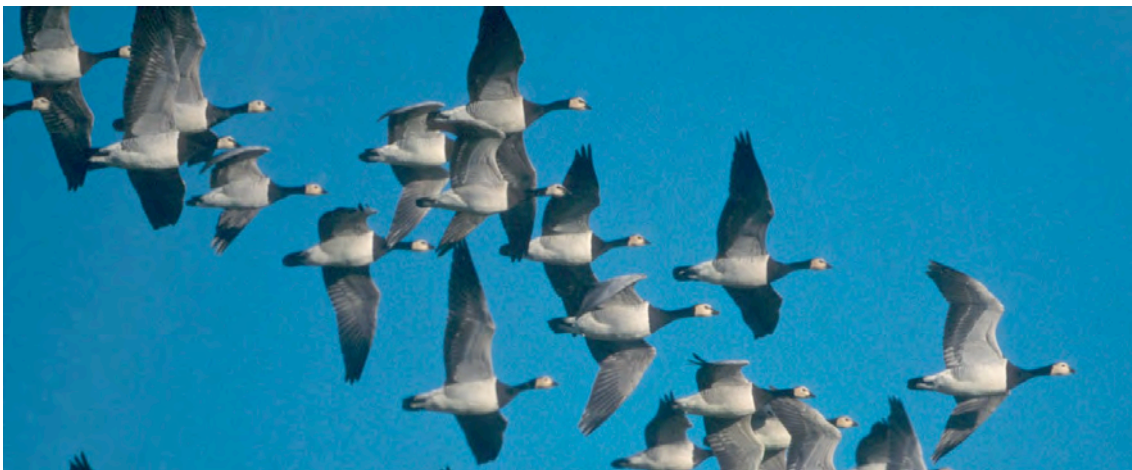
Report from the International Conference “Goose Management: Challenges 2015”, Gram Slot, Denmark, 27-29 October 2015

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Introduction

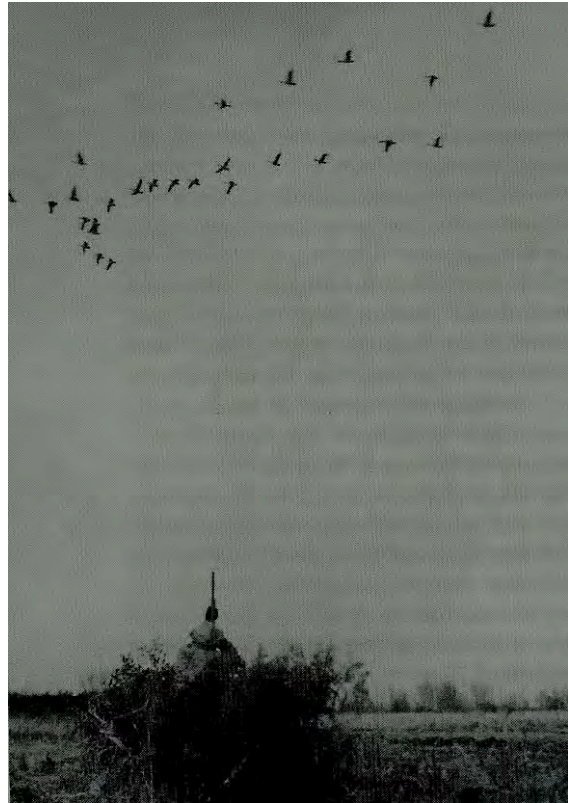
We are all very much aware of the increasing impact caused by migratory and sedentary goose populations to economic activities and natural ecosystems in Europe. However, this often in stark contrast to those huntable migratory populations of geese, which are showing unfavourable conservation status at the present time and which require coordinated international measures to restore their favourable conservation status. It is becoming increasingly clear that such flyway wide challenges require major international flyway coordination to deliver effective solutions at different spatial scales. In Denmark, a number of issues have brought such challenges into sharp focus. Dramatically increasing numbers of breeding and non-breeding Barnacle Geese have especially caused major conflicts with agriculture, other facets of biodiversity conservation and pose increasing risks of bird strikes at Copenhagen International Airport within Denmark specifically. Because of the increasing realisation that the problems cannot be alleviated by local actions alone, the Danish Minister of Environment and Food had specifically called for international collaboration to alleviate the escalating and complex conflicts with Barnacle Geese. As a result, the Danish Nature Agency, Danish Ministry of Environment and Food and Aarhus University jointly hosted a three-day international conference at Gram Slot, Denmark to review the nature of the problem, hear how other countries have solved some of these issues associated with other goose populations and to share their common needs and experiences. The organisers of the conference were keen to find effective means to tackle these urgent issues, not just within Denmark, but integrated at greater scales, with the objective of moving towards the long-term sustainable use of all huntable migratory geese, and indeed all waterbirds, in Europe. The 44 attending delegates included national and regional government representatives, managers and experts from Belgium, Canada, Denmark, Estonia, France, Iceland, the Netherlands, Norway, the UK and the USA as well as airport authorities, the Wadden Sea Forum, the European Commission and the UNEP/AEWA Secretariat.



Background to the meeting

As geese throughout the world have benefitted from the abundance of food provided by intensive agriculture, so growing populations have reduced some crop yields, impacted on biodiversity, elevated airport airstrike risk and created health and nuisance issues in urban areas. However, we know that, at the same time, geese are of enormous societal value, whether as cultural objects of pleasure and wonder, the basis for hunting or the provision of ecosystem services. Furthermore, there remain huntable populations of unfavourable conservation status where some form of regulation of exploitation and changes to other forms of management may be necessary to re-establish their former abundance and distribution. For these reasons, many goose populations have been the focus of specific conservation actions, especially following the Second World War, when numbers of several key populations were substantially lower than is the case today.

There is no doubt now, therefore, that the resolution of current societal conflicts created by goose abundance requires structured decision-making, as well as coordinated interventions, especially because all populations move between multiple countries during their annual cycles.



The conference reviewed the way in which those countries present at the conference currently attempt to resolve these conflicts nationally and more locally, as well as attempting to assess the various levels of satisfaction across stakeholder groups with the current management outcomes. The meeting agreed that internationally coordinated management plans are essential for the effective integration and delivery of conflict resolution at all scales. These are most effective when based on evidence-based decision-making frameworks resulting in clear management objectives, and preferably organised within adaptive management frameworks. In this respect, Europe has a great deal to learn from the experiences of North America, where the implementation of adaptive harvest management in particular has been a cornerstone of waterbird management for many years. The example of the AEWA Pink-footed Goose International Single Species Management Plan already demonstrates the value of setting favourable reference values (*e.g.* a socially constructed target population size range) as key objectives for such a planning process. The meeting also recognised the need for the effective implementation of these population plans at national, regional and local levels. It is widely seen to be of fundamental importance to engage all stakeholders from the outset to establish clear objectives, transparent governance, and effective and integrated monitoring mechanisms to enable effective follow-up and adjustments of actions taken.

Conclusions/Recommendations

The conference discussion ranged very widely, but the meeting concluded with a number of suggestions and recommendations to be taken forward. In summary, the most important of these were that:

- The overall goal is to maintain or restore the favourable conservation status of all goose populations listed under AEWA.
- International flyway solutions are needed for the management of both decreasing and increasing huntable goose populations in Europe - regardless of whether harvest is used as a management tool (including derogation shooting) or not.
- There was unanimous support from those countries present for the development of a European Multispecies Goose Management Platform under AEWA (although subject to the commitment of other relevant Range States). It was agreed that any approach should be flexible - allowing for modification to ensure that the process delivers on objectives and for the future addition of other species/populations.
- Long-term commitment to the adaptive harvest management processes for the various populations will be required from all Range States along the flyway(s) before their development can begin. Government representatives were encouraged to promote the establishment of the platform to the Range States not present – in particular those outside of the EU, such as Russia.
- In addition to the already established process for Pink-footed Geese and the AEWA Single Species Action Plan developed for Taiga Bean Geese, the meeting supported developing AEWA International Management Plans for Barnacle Geese (three populations) and northwest European Greylag Geese as proposed by Denmark and France, respectively. These six populations will be the initial focus of the European Multispecies Goose Management Platform.
- Regarding the collection of annual population data necessary for running adaptive harvest management processes, it was stressed that much of the relevant data for the countries present at the meeting was already available and merely required compilation from individual countries and data-holders.
- The lack of information on harvest bag numbers in many countries - a crucial component to any adaptive harvest management process - was highlighted as an issue of special concern. It was agreed that assistance from FACE and the hunting community was essential to ensure that relevant and comparable harvest bag data was available. Involvement of the hunting community and managers in goose monitoring, harvest reporting and the adaptive harvest management process was seen as essential.
- The meeting requested that the costs of the establishment and running of the Goose Management Platform be presented to AEWA member states in the context of the very significant current and potential future national subsidies/compensation costs for damage in the face of increasing goose populations.
- The meeting recognized the increasing political pressure in many countries – particularly in Denmark and the Netherlands – to reduce the number of conflicts related to Barnacle Geese as well as to reduce the amount of subsidies/compensation paid.

- It was recommended that all three Barnacle Goose populations (breeding in Greenland, Svalbard and Russia/Baltic/North Sea, respectively) as well as resident breeding populations be included in any future International Management Plan for the species – although the objectives and management approaches would have to be specifically tailored to each population. Separate management planning processes would be essential for each population and these processes should be independent of each other timewise in order to ensure timely delivery of each, whilst ensuring best practice through sharing of population experiences.
- Initial discussions on possible objectives for the Russian/Baltic/North Sea Barnacle Goose population suggested a step-by-step approach, setting a relatively high initial population target to avoid the potential risk of overexploitation. Population targets set within the adaptive harvest management process could be adjusted over time, depending on the population trends of each population and related conflict resolutions.

Agreed actions

The meeting agreed a series of actions to be taken forward as follows:

- To seek mandate for the development and establishment of a European Multispecies Goose Management Platform from the AEWA Meeting of the Parties at its 6th session (MOP6) in Bonn, Germany (9th – 14th November 2015).
- To secure buy-in and long-term commitment from all relevant Range States to the process - including financial commitment - on the basis of further detailed planning in early 2016.
- To establish adaptive harvest management process in early 2016 for the Taiga Bean Goose following adoption of the Action Plan at MOP6.
- To initiate the management-planning processes for the Barnacle and Greylag Goose once Range State commitment has been secured (in the course of 2016).
- To engage in legal discussions with the European Commission on derogations with respect to hunting and other management measures for the Barnacle Goose (which is currently on Annex I of the Birds Directive) in the EU Member States.
- To launch the European Multispecies Goose Management Platform in the course of 2017.
- To incorporate both the Pink-footed Goose and Taiga Bean Goose plans under the European Multispecies Goose Management Platform.

We very much look forward to outcome of these actions from the AEWA MOP6 and eagerly await developments.



Outstanding Ornithologist of the past: Aubyn Trevor-Battye 1855-1922

Johan H. Mooij

Aubyn Bernard Rochfort Trevor-Battye was born as Aubyn Bernard Rochfort Battye in Hever in Kent (United Kingdom). His father, the Reverend W.W. Battye, inherited Trevor estates in 1883 and after his death in 1890 the family adopted the name Trevor-Battye.



Aubyn Trevor-Battye belongs to those typical Victorian/Edwardian wealthy British travellers, who sought to explore poorly known parts of the world just because they liked travelling, exploring and experiencing the geography and culture, flora and fauna, as well as collecting all kinds of observations, data and species.

Trevor-Battye was an excellent observer of people and wildlife, a fine draughtsman and a good story-teller. In the course of his life, he wrote four books and a number of scientific papers, popular articles and short stories as well as some chapters in books of other authors about his expeditions.

In one of these books, “Ice-Bound on Kolguev”, Trevor-Battye wrote about his expedition to the island of Kolguev in the Barents Sea in 1894. This work is interesting for “goose people”, because it is the first description of the flora and fauna of the island, especially with regard to his information about the occurrence of geese. In his time, the Brent Goose (*Branta bernicla*) was the most common breeding goose species on Kolguev, followed by the Tundra Bean Goose (*Anser fabalis rossicus*) and the White-fronted Goose (*Anser albifrons*), whereas the Barnacle Goose (*Branta leucopsis*) was only represented by a few pairs.



Catching moulting Brent Geese by Samoyeds
(Trevor-Battye 1895)

He states that Samoyeds did not want to show him the huge Brent goose colonies because these birds were extremely important for them as winter food and each year thousands of Brents were caught and killed by them during moult. Nowadays Brent geese no longer breed on the island anymore and Barnacle geese are the most common goose species, followed by the White-fronted Goose.

In later years Trevor-Battye travelled through Northern Russia, to Spitsbergen, Africa, Crete and India. After World War One (1914-18) he suffered more and more problems with his health and moved to the Canary Islands, where he died at Las Palmas 1922, aged 67.

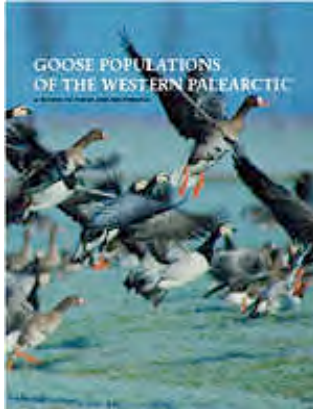
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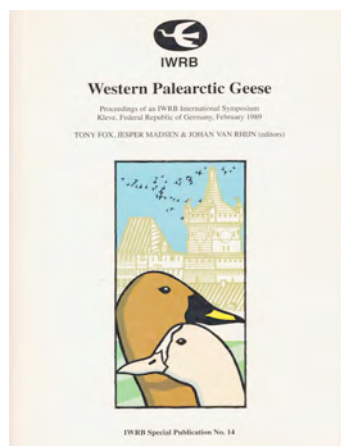
The Goose Specialist Group made an impressive compilation (edited by Jesper Madsen, Tony Fox & Gill Cracknell) of our knowledge on the status and distribution of the goose populations of the western palearctic. This book is not for sale anymore, but a digital copy can be downloaded for free from:

http://issuu.com/jesper_madsen/docs/goosepopulationswestpaleartic

or from

<http://bios.au.dk/en/knowledge-exchange/about-our-research-topics/animals-and-plants/mammals-and-birds/goose-populations-of-the-western-paleartic/>

Furthermore it is still possible to receive a printed copy of the official proceedings of earlier meetings of the Goose Specialist group, as there are:



Proceedings Goose Meeting 1989
(Kleve, Germany)

Interested? Please contact:
johan.mooij@bskw.de



Proceedings Goose 2007
(Xanten, Germany)

Interested? Please contact:
johan.mooij@bskw.de



Proceedings Goose 2009
(Höllviken, Sweden)

Interested? Please contact:
leif.nilsson@zoekol.lu.se

Proceedings of the 14th meeting of the Goose Specialist Group

The proceedings of the 14th meeting of the Goose Specialist Group held in Steinkjer, Norway in April 2012 have been published in the online journal *Ornis Norvegica*, which is the scientific journal of the Norwegian Ornithological Society (Norsk Ornitologisk Forening – NOF). You can find articles from the 2012 meeting, as well as a number of other ornithological papers which are surely of interest on the journal website:

<https://boap.uib.no/index.php/ornis/issue/view/62>



Proceedings of the 15th meeting of the Goose Specialist Group



The proceedings of the 15th meeting of the Goose Specialist Group held in Arcachon, France in January 2013 have appeared as a special edition of the journal **Wildfowl**.

By sending an email to wildfowl@wwt.org.uk a printed copy of this Special Issue (nr.3) can be ordered at the cost of £17 plus an additional £3.50 for credit card transactions.

It also can be downloaded for free at:

<http://wildfowl.wwt.org.uk/index.php/wildfowl/issue/view/285>



The journal Wildfowl

Wildfowl is an international scientific journal, published annually by the Wildfowl & Wetlands Trust (WWT).

The journal appeared originally as the Annual Report of The Severn Wildfowl Trust at the end of the Trust's first working year in 1947. From the outset it presented the results of scientific research in order to improve knowledge and understanding of wildfowl populations. It now disseminates original material on the ecology, biology and conservation of wildfowl (Anseriformes) and ecologically-associated birds (such as waders, rails and flamingos), and on their wetland habitats.

The complete back catalogue of Wildfowl is available via the Open Journal System at <http://wildfowl.wwt.org.uk>





Greater White-fronted Goose by John Gould

John Gould was a British ornithologist and bird painter. He was born 1804 in Lyme Regis (Dorset) and died 1881 in London.



Call for help:

As discussed during the Höllviken meeting we invite all goose researchers to send their publications to our data bank of geese literature. Not only international but also local publications (including those in languages other than English) are most welcome.

Please send your publications, preferably as a pdf file, to Fred Cottaar - fred.cottaar@tiscali.nl.



Instructions to authors

The Goose Bulletin accepts all manuscripts dealing with goose ecology, goose research and goose protection in the broadest sense as well as Goose Specialist Group items.

All manuscripts should be submitted in English language and in electronic form. Text files should be submitted in “.doc”-format, Font “Times New Roman 12 point”, tables and graphs in “.xls”-format and pictures in good quality and “.jpg”-format.

Species names should be written with capitals as follows: Greylag Goose, Greenland White-fronted Goose etc. Follow an appropriate authority for common names (e.g. Checklist of Birds of the Western Palearctic). Give the (scientific) Latin name in full, in *italics*, at first mention in the main text, not separated by brackets.

Numbers - less than ten use words e.g. (one, two three etc) greater than 10, use numbers with blank for numbers over 1 000.

In case of doubt please look at the last issue of the Goose Bulletin.

