Red-breasted Goose Branta ruficollis

Implementation of the International Single Species Action Plan

November 2009

Coverage

The report covers the implementation between 2004 and 2009 of the International Species Action Plan developed in 1995 and adopted by the Ornis Committee, Bern Convention and the Convention on Mirgatory Species. The SAP envisaged a 5 year review cycle and/or update when significant changes in the agricultural policies of Romania and Bulgaria do occur. The geographic scope of the review covers the entire range of the species in Azerbaijan, Bulgaria, Greece, Kazakhstan, Romania, the Russian Federation, Turkey, Ukraine and Uzbekistan. Currently three of these key range states are EU members. Data was received from all range states, except Turkey and Uzbekistan whose importance for the species is marginal. Countries where the species occurs in insignificant numbers as a rarity or a vagrant – i.e. Hungary, Netherlands, UK were not included in this review.

Current Population Status

In 2007 the species was up listed from "Vulnerable" to "Endangered" on the IUCN Red List due to a "significant decrease of the numbers registered in the last 5 years of coordinated monitoring of the species at the wintering grounds in Bulgaria, Romania and Ukraine" (BirdLife International, 2009). The population at the time of the drafting of the SAP in 1995 was estimated at 70,000 to 74,000 birds, while the current population is considered to about 40,000 - 44,000 birds (Dereliev in litt.). The estimate based on the coordinated counts in the three countries was lowest in 2005 -32, 000 birds (Fig. 1) which would represent more than 50% decrease over 10 years period since the drafting of the action plan (BirdLife International, 2009). Despite that there is some uncertainty to what extent such a large scale decrease is due to actual decline or some of the birds are short stopping further north in Ukraine or even Russia. Nevertheless it seems very unlikely that as large a group as 15,000 or 20,000 red-breasted geese could be staging during winter time undetected along the migration route. Up to 90% of the registered wintering population may occur within EU range countries (Bulgaria and Romania and sometime Greece) in cold winters. There is clear tendency as in number of other Arctic breeding species to short stop and overwinter further to the east due to mild winters, which makes the assessment and monitoring of the population more difficult.

Figure xxii Counts of the wintering population of red-breasted geese as result of coordinated monitoring scheme in Ukraine, Romania and Bulgaria (data from: www.brantaruficollis.org)

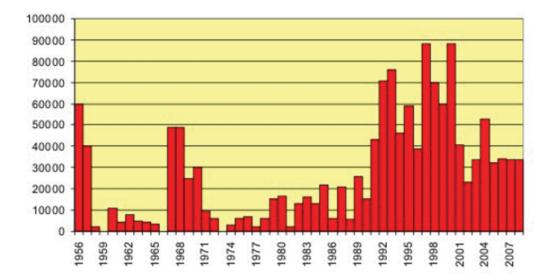


Table 58 Population estimates of the red breasted goose, based on winter counts (individuals)

Country	Average Population size in Europe 1992-1994	2000	2006	2009			
Bulgaria	44,000	50,119	28,248	18,965			
Romania	15,290	5,375	1,531	10,371			
Ukraine	1,012	14,605	2,896	14,942			
Greece	3	16	7	0			
Other European countries	3	84	1,510 (Russia 1,500 birds)	12			
TOTAL	59,398	70,199	34,191	44,290			

Evaluation against targets

Following a dramatic decline in the 1970s and 1980s the global population in the 1990s was clearly stabilized at about 70,000 - 80,000 birds. Maintaining that level of the population was the short term aim of the SSAP (Hunter and Black, 1996). However since the late 1990s and early 2000s a new decline has been registered in the wintering population which reached its lowest numbers of 34,000 birds in mid 2000s. Currently there is an indication of slight recovery of the population with recent counts of up to 44,000 birds (in January 2009 –

<u>www.brantaruficollis.org</u>). Thus based on the population figures, it could be concluded that none of the targets of the action plan have been met.

Evaluation of the implementation of conservation actions

Species Protection (action 1.2)

The species is fully legally protected throughout its range including all EU range states. However the overall average implementation score is 2.4 (3.0 for the EU), which indicates problems with enforcement of the protection status. According to wardens in Kustanay region in Kazakhstan about 3000 RBG might be killed on an annual basis deliberately or accidentally (C. Mitchell in litt.). Cases of shooting at and killing of RBG do occur on a regular base in EU range countries and has been well documented for example in the main wintering areas in Bulgaria at Shabla and Durankulak lakes (BSPB in litt.). The fact that at many sites it mixes with quarry species like the Greater White-fronted Goose leads that shooting at the huntable species results in mortalities of RBG and disturbs them during foraging time. According to the local experts in Bulgaria about 3 to 5 % of the wintering Red-breasted Geese are being impacted every winter, incl. killed and injured. This assessment does not take into account the impact on the physical condition of the birds caused by disturbance by shooting and how does it affect their fattening process. The Bulgarian Society for the Protection of Birds, supported by WWT is working with the regional authorities in the main wintering area to reduce poaching and illegal shooting on the species and promote better enforcement of the legislation. Another problem for securing sufficient protection for the species in its wintering grounds comes from the almost annual attempts in Bulgaria to prolong the hunting season for waterfowl beyond 31 January. This in combination with the current lack of secure foraging grounds where the species could feed undisturbed by hunters could be detrimental for the survival of large part of the population and impact the species as it is widely accepted to be a capital breeder and depends on the fattening and resource storage before heading north for breeding season. As a result, the implementation score for this action is "2" in Bulgaria.

National and regional species action plans

The two main wintering range countries Bulgaria and Romania have developed National Species Action plans. However they are not officially adopted by the relevant national authorities. No other range country has developed a national species action plan.

Site protection (action 2.2.1 and 2.2.2)

Within the EU, up to 90% of the wintering population is covered by national protected areas and SPAs (action 2.2.1, AIS=3.0) but problems with ineffective enforcement and inefficient protection regimes remain. Usually strictly protected areas cover the roosting sites and include very limited foraging areas in the immediate vicinity. Sufficiently large buffer zones to prevent disturbance around the roosting lakes are not ensured, thus protection from disturbance by shooting is not provided. Another problem is the continuous pressure for urbanisation and windfarms in and around the SPAs along the Black Sea coast, including the immediate surroundings of the coastal lakes used for roosting (esp. in Bulgaria). Therefore, the evaluation of action 2.2.2 "Development proposals likely to affect the species and its habitat are subject of Environmental Impact Assessment" has received lower scores (AIS=2.0, and 2.3 in the EU only).

Identification of staging areas has continued steadily in Central Asia. The recent publication of the IBA books of Kazakhstan, Uzbekistan and Turkmenistan has put on the map the key sites for the conservation of the species in these countries which filled in a significant gap.

In Kazakhstan much larger numbers of migrating RBG are found in IBAs which are not legally protected. This often leads to problems with illegal shooting of the species. In Russia the main site for migration in the Kuma-Manych area is protected, however the distribution of the RBG roosting areas is influenced by the water level. During low water levels the geese spread outside the protected area and are exposed to hunting pressure.

Within the breeding range, due to the dispersal in enormous area, site based conservation is not feasible.

Management plans of important sites

Although there is no specific action for management plans in the SAP, appropriate site management is of key importance for such a congregatory species, especially outside of the breeding season. Management plans with specific focus on the Red-breasted Goose have been developed for some of the key wintering roosting sites which require active implementation of conservation measures. For example the Shabla and Durankulak lakes in Bulgaria have management plans since 1997, but they were only recently officially endorsed. However, the financial and institutional capacity for their implementation is still very limited. In addition the plans do not cover the foraging areas. A management plan was developed within a LIFE Nature project (04NAT/RO/000220) for Techirgol Lake (SPA) in Romania. Protected area zonation is in place for the Kuma-Manych area in Russia and pilot habitat measures have been developed and implemented to improve foraging areas for migrating geese. In Greece, management activities were implemented in the Evros Delta Drana Lagoon (SPA), which in a peak year has sheltered up to 2,400 birds. The breeding areas in Arctic Russia are not subject of active conservation management.

An essential gap is that the existing site management plans do not address the need to ensure favourable grazing conditions in the foraging areas. To meet the species needs, the plans must be complemented with targeted agri-environmental schemes in the areas surrounding the roosts. Reduced disturbance and avoidance of displacement by infrastructure at the feeding grounds should also be provided.

Habitat conservation

As the species is too dispersed at its breeding grounds it is difficult to ensure site based protection. General precautionary policy is required to ensure that natural gas, oil and other natural resources exploration do not degrade significantly the species' breeding habitats. The expected impact of climate change on the tundra is unfavourable to the species. Reliable prediction modelling for the breeding habitat in the Arctic is yet to be made.

The habitat use of the species in the main wintering areas in Bulgaria, Romania and Ukraine has two components –wetlands used for roosting during the night and the foraging habitat – in the predominant part arable land with winter cereals. The key elements of effective habitat management are engaging the farmers in producing suitable crops (e.g. agro-environmental schemes), eliminating disturbance at the roosting and foraging areas (regulating hunting) and preventing destructive developments to both (site protection and EIA).

Incentive measures for the maintenance of goose friendly agriculture have been developed in Bulgaria and Romania through the agri-environmental measures. However these are still not

implemented. The Romanian scheme, result of a special project, is not yet included in the National Rural Development Programme. The Bulgarian agro-environmental scheme, is based on expert proposals, has not been implemented yet. Unfortunately no legal and financial mechanisms for such incentives exist outside the EU. In Russia, for example the Kuma-Manych depression, land abandonment leads to deterioration of the foraging area for the species. In this specific area the problem is tackled by pilot activities on local level, but larger scale state supported programmes are needed to expand the coverage.

Therefore the implementation of the SAP measure "Management of feeding habitat carried out at staging and wintering areas as a result of specific researches" (AIS=2.0) is assessed with the score "2" for the EU MS Bulgaria, Romania and Greece. The effect other threats causing loss of foraging habitat have not been taken into account in evaluating this measure, but under 'Site protection'.

Research and Monitoring

The bulk of research on the red-breasted goose, especially in the breeding grounds was done in 1980s and 1990s. Unfortunately, much of the published results are not in widely available international journals or remain in the grey literature.

Monitoring of the breeding population is taking place in a small sample area in the Taymirski biosphere reserve ("Distribution and numbers of breeding Red-breasted Goose monitored", AIS=2.0).

Efforts to improve monitoring of the red-breasted goose population along its flyway have increased considerably since the adoption of the action plan. Actions in the wintering and staging areas were boosted with the International Red-Breasted Goose Working Group's Common Monitoring Programme (CMP) in 2003/2004. It includes coordinated counts once a month from November till March at key sites in Bulgaria, Romania and Ukraine and supplemented by counts during the autumn and spring migration from Russia in the Kuma-Manych area and additional autumn counts from Kazakhstan.

The operation of the CMP supplied data for annual population estimates for the species for the last 5 years. Within the assessment questionnaire this action received the high scores ("Population size and structure monitored annually at wintering grounds", AIS=2.8 and 3.3 in the EU).

The species is also comparatively well covered by the International Waterbird Census coordinated by Wetlands International and implemented by all range countries. Inventories for new IBA designation have resulted in new and updated information for key sites for the species since the 1990s. Action "All staging and wintering areas identified and monitored; their status and threats evaluated" is therefore evaluated particularly well (AIS=3.0 and 3.7 in the EU).

In Bulgaria regular monitoring of the phenology of the Red-breasted Goose has been implemented by the BSPB since 1995 and is currently the longest running single species monitoring programme in the country. It has allowed in some years data on the age structure, foraging distribution and concentrations, abdominal profiles and physical condition related to breeding success to be collected. Action "Understanding of feeding and behavioural ecology provides useful information for management planning" is therefore evaluated as partially successful, because it is not done systematically (AIS=1.7 and 2.0 in the EU). It is important that this monitoring informs management measures for the habitats of the species and does not remain only a scientific exercise (Action "Changes in land use in wintering areas monitored", AIS=1.8 and 2.7 in the EU).

The highest priority for monitoring outside the current census work at the wintering sites should be given to satellite tracking to identify possible new staging areas or wintering grounds to ensure that the population is sufficiently covered by the census efforts in winter or if unknown migration concentration do occur. There is a need of improving the information on the breeding grounds and to give light on the condition and extent of the breeding range, impact of climatic change in the breeding habitats. Much more robust assessment of the impact of hunting on mortality and the physical condition of the birds is needed to inform and support conservation management decisions, especially in the staging areas (Action "Effect of hunting (mortality and disturbance) assessed", AIS=1.6 and 3.0 in th EU).

Networking and awareness raising

International cooperation in conserving the species has been actively promoted within the AEWA, however not all range countries have joined the agreement yet (Action "AEWA signed and ratified", AIS=2.5 and 4.0 in EU). There haven't been any additional initiatives on governmental level targeted at the species among the involved range states (Action "Specific inter-governmental agreement developed for the conservation of the species", AIS=1.0).

The conservation work on the Red-breasted Goose has been coordinated by the International Red-breasted Goose Working Group <u>www.brantaruficollis.org</u>. It was first established as part of the WI-IUCN SSC Goose Specialist Group and later re-launched as independent experts group in 2004 with a full time staff coordinator whose position is funded jointly by AEWA, RSPB, WWT and BirdLife Netherlands. Since then several workshops aiming at updating the current SAP and re-engaging the network of experts across the range have taken place. This concerted effort on the species and keeping a live network of contacts has resulted in better knowledge of the population status and trends.

In recent years many efforts and activities have been launched to promote and boost the species conservation through awareness and education work. In the Romanian wintering grounds workshops for farmers, hunters and fishermen were organised to improve the cooperation and awareness amongst stakeholders. In Bulgaria concerted efforts have been targeted in the area of Shabla and Durankulak lakes since the 1990s. Permanent work in the region is carried out by BSPB in close cooperation with WWT. It includes regular awareness activities and lectures, meetings with local authorities' representatives and even including twinning between the village schools in Durankulak, Bulgaria and Callaeverock in Dumfries and Galloway region in Scotland. In Ukraine various awareness materials have been produced and distributed. Cooperation with the local hunters and fishermen is established also making them part of the census teams for the RBG counts. In Russia the Russian Working Group on Geese has worked actively with hunters in Kuma-Manych area along with the wardens of the protected area (Action "Education/awareness programmes targeted at hunters, fishermen and farmers carried out", AIS=2.0 and 2.7 in the EU).

Community financial support

Only one LIFE project targeted at the species has been implemented since the previous evaluation in 2004. The beneficiary was the National Administration of Romanian Water – Department of Water Dobrogea Littoral. The aim was to ensure safe roosting conditions at the key roost site Lake Techirghiol and suitable feeding grounds on 30 ha in the vicinity of the lake. On average about 17% of the world population (information provided by SOR) has benefited. The total project budget was \notin 657,028.00 (\notin 492,771.00 as EC contribution).

Conclusions

As the species population has dropped dramatically in the past 10 years, despite of some recent signs of recovery, none of the SAP objectives have been achieved. The average implementation score for the action plan is 2 for the whole range and 2.7 for the EU part. The National Implementation Score is highest in Greece (3.2), where only a very small proportion of the population occurs, while implementation is still weaker in Bulgaria (2.3) and Romania (2.6) hosting up to 97-99% of the population of the EU. This clearly shows the positive potential of the EU legislative framework for the species, especially if a number of key conservation measures be more effectively implemented in Bulgaria and Romania.

The lowest scores are assigned to Ukraine (1.5) Russia (1.6) and Kazakhstan (1.6) where the key challenges continue to be weak law enforcement and low priority of biodiversity on the national governments agenda.

Further concerted efforts have to be made, especially by key countries Bulgaria, Romania, Ukraine, Russia and Kazakhstan in order to:

- Develop, adopt and finance the implementation of National Species Action Plans.
- Improve the legal enforcement for full protection of the species.
- Prevent harmful projects and programmes in the stopover and wintering sites, e.g. tourist development in or at the protected area borders through rigorous implementation of EIA.
- Create and make operational the available financial incentives to maintain suitable foraging areas especially the ago-environmental schemes in the EU members Bulgaria and Romania.
- Develop and implement a satellite tracking programme to establish stop-over sites and wintering areas are well known and adequately covered by monitoring efforts.
- Ensure that national governments give high priority to the species and its protection, along with its key sites are well protected and monitored with sufficient financial and human resources in place for conservation and monitoring work

Contributors

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Additional Sorces of information:

http://www.birdlife.org/datazone/ www.brantaruficollis.org

Action No.	Target	Priority score	Bulgaria	Greece	Romania	Russia	Kazakhstan	Turkmenistan	Azerbaijan	Ukraine	AIS	AIS in the EU
1.1	Agricultural policies in the wintering countries maintain favourable feeding conditions for the species	4	1	2	2	3	0	0	3	1	2.0	1.7
1.2	The species is fully protected and protection is effectively enforced	4	2	4	3	2	2	1	2	3	2.4	3.0
1.2.1	The hunting season ends at the end of January in wintering countries.	2	3	1	2	1	0	0	2	4	2.2	2.0
1.3	AEWA signed and ratified.	3	4	4	4	1	1	1	1	4	2.5	4.0
2.1	Hunting bans established at all key sites and in their buffer zones when the species is present.	4	2	4	2	2	2	2	1	1	2.0	2.7
2.1d	Poisoning prohibited at key sites.	4	2	0	4	1	2	4	1	1	2.1	3.0
2.2.1	All internationally important sites are designated as protected areas		2	4	3	2		2	4		2.8	3.0
2.2.2	Development proposals likely to affect the species and its habitat are subject of Environmental Impact Assessment	3	1	4	2	1	1	0	1	4	2.0	2.3
2.3	Use of rodenticide is controlled where it is a problem for the species.	2	2	0	4	1	1	0	1	1	1.7	3.0
2.4	Management of feeding habitat carried out at staging and wintering areas as a result of specific researches.	2	2	2	2	3	1	0	1	1	1.7	2.0
2.5	Specific inter-governmental agreement developed for the conservation of the species.	3	1	1	1	1	1	0	1	1	1.0	1.0
3.1a	Population size and structure monitored annually at wintering ground	4	3	4	3	2	2	1	3	4	2.8	3.3

Appendix: Table 59 Red-breasted goose ISSAP Implementation scores (2009)

Action No.	Target	Priority score	Bulgaria	Greece	Romania	Russia	Kazakhstan	Turkmenistan	Azerbaijan	Ukraine	AIS	AIS in the EU
3.1b, 3.2.3	Distribution and numbers of breeding Red-breasted Goose monitored.	4	0	0	0	2	0	0	0		2.0	0.0
3.2.1, 3.2.2	All staging and wintering areas identified and monitored; their status and threats evaluated.	4	4	4	3	1	3	4	4	1	3.0	3.7
3.3.1	Research on the relationship between spring fattening and breeding success carried out.	i.e.	1	0	1	1	1	0	0	0	1.0	1.0
3.3.2	Understanding of feeding and behavioural ecology provides usefuls information for management planning.	2	2	3	1	2	1	0	0	1	1.7	2.0
3.3.3	Feeding ecology of breeding females studied.	2	0	0	0	1	0	0	0	0	1.0	0.0
3.3.4	Changes in land use in wintering areas monitored.	4	3	4	1	1	0	0	1	1	1.8	2.7
3.5	Effect of hunting (mortality and disturbance) assessed.	3	3	3		1	1	1	1	1	1.6	3.0
3.6	Impact of the use of rodenticides understood.	2	1	0	4	0	1	0	0	2	2.0	2.5
4.1.1	Public awareness on the importance of the species increased.	3	2	3		2	2	1	1	2	1.9	2.5
4.1.2	Education/awareness programmes targeted at hunters, fishermen and farmers carried out.	3	2	3	3	1	-	1	1	3	2.0	2.7
4.2	Red-breasted goose used as a flagship for the conservation of its habitat.	3	3	3	2	2	-	0	1	1	2.0	2.7

National Implementation Scores

2.3 3.2 2.5 1.6 1.6 1.8 1.6 1.5

AIS	2.0
AIS EU	2.7