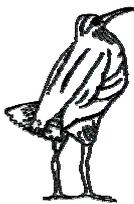


INTERNATIONAL ACTION PLAN FOR THE GREAT SNIPE *Gallinago media* (Latham, 1787)



This International Action Plan for the Great Snipe (Gallinago media) was commissioned by BirdLife International. It has been compiled by John Atle Kålås, Norwegian Institute for Nature Research and is based on a workshop held in Estonia from 22-23 February 2002, and on comments given by ORNIS committee members for range states in the EU, Bern Convention, government officials outside EU, BirdLife partners and a number of other people who have kindly shared their knowledge with us (see Annex III). We would also like to mention the importance of the support given by OMPO for the development of knowledge about the Great Snipe in Lithuania, Estonia and Belarus during the latest 5 years. Financial support for the preparation of this Action Plan is given by Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA). The content and structure of this document is based on guidelines given by BirdLife International, and the Dark-Bellied Brent Goose Action Plan developed in 2000 has been used as a model.

May 2002

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Summary

What is the profile of the Great Snipe?

At present the Great Snipe breeds in two separate areas, a western population in the Scandinavian Mountains and an eastern population from Poland throughout the Baltic States, Ukraine, Belarus and the boreal areas and bush-tundra areas in Russia eastwards to the Yenisey river in Siberia. It winters with several stop-over sites in tropical Africa and seems to have a rapid spring and autumn migration with a few, short stop-overs between African wintering areas and the breeding sites. The population declined dramatically at the end of the 19th and the first half of the 20th century when the species disappeared from the Netherlands, Germany, Denmark, Finland and the lowlands in Sweden and Norway. During the same period there was also a considerable population reduction in Poland, the Baltic States, Ukraine, Belarus and in Russia (best documented for the southern parts).

The western breeding population (Scandinavian Mountains) seems now to be stabilising and is roughly estimated to hold 6,000 - 17,000 'pairs'. The population in Poland and the Baltic is estimated to be 1,600 - 2,300 'pairs', and the Belarus population estimate is 4,600 - 6,000 'pairs'. Many structural changes in the agricultural practices in these areas are currently causing a major threat to this fraction of the population. The Russian population is roughly estimated to be more than 250,000 'pairs'. The information about population size and population changes for the Russian population is very fragmented, but the southern part of this population is apparently experiencing a continued decline (Tomkovich 1992).

The Great Snipe is currently classified as "Near Threatened" at global level (BirdLife International, 2000). At European level it is considered 'Vulnerable' and classified as SPEC 2 (concentrated in Europe with an unfavourable conservation status) (Tucker & Heath, 1994). The species is listed in Annex I of the European Birds Directive (79/409/EEC), indicating that the species "shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution", and that "Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species, taking into account their protection requirements in the geographical sea and land areas where this Directive applies". It is on Annex II (species which would benefit from international co-operation in their conservation and management) of the Bonn Convention, and in the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) the Scandinavian Great Snipe population is listed in table 1 column B category 1, while the eastern population is categorised in column B category 2, which requires: 'Parties to regulate any taking so that it is sustainable, in order to maintain and restore the population to a favourable conservation status and more in general request special attention for the species because the population showing significant long-term decline'. The Great Snipe is listed in Annex II (take appropriate and necessary measures for the conservation of the habitats of the species) of the Bern Convention.

Why an international Action Plan for the Great Snipe?

The population of the Great Snipe is not directly threatened at present. However, it would be classified as "Vulnerable" at a global level if the current decline continues. The AEWA category B1 status for the western population and B2c for the eastern population indicate that it needs special attention, particularly so because it is a habitat specialist demanding upon open and nutrient areas for breeding: areas where a conflict with human activities easily occurs.

What is the basis of the Action Plan?

This Action Plan is the result of an extensive consultation process among specialists, including a workshop with 10 participants from 7 countries held in Tartu, Estonia from 22-

23 February 2002, and communication with ORNIS Committee members for each range state in the EU, Bern Convention, AEWA Technical Committee members, government officials outside EU and BirdLife Partners. Since there are important gaps in our knowledge about population biology (e.g. details about the breeding range, population size, migration habits, wintering range) and ecology (e.g. habitat use and diet, particularly outside the breeding season) of the Great Snipe, one of the most important actions proposed here is the gathering of relevant knowledge, so that later reviews of this Action Plan can be more focused on the most important direct conservation activities.

What is the objective of the Action Plan?

The general objective of the plan is to permit the Great Snipe to reach a level of population that will remove the species from the "Near threatened" list. In this first phase it implies putting a stop to the population decline in areas where the species still occurs.

What does the Action Plan consist of?

The Action Plan presents a framework for management and conservation of habitats and the population. Measurable objectives are set at national and international level, and general management options are given for the countries where the species at present breeds. The Great Snipe is a secretive species and we still lack significant knowledge about the population biology of the species. This Action Plan, therefore, also includes a list of gaps in our knowledge, which are needed to perform an optimal management of the species.

Which countries are involved?

Implementation of the Action Plan requires effective international co-ordination of organisation and action. In this Action Plan countries where breeding occurs (Norway, Sweden, Poland, Estonia, Latvia, Lithuania, Ukraine, Belarus and Russia) are especially involved with the implementation. The countries visited during migration and wintering are handled more generally. For migration (ca. 50 countries) this is so because of the apparently low importance of stop-over sites during migration, and for wintering (ca. 35 countries) this is caused by the general lack of detailed information about winter occurrence (e.g. movements during the winter) and winter habitat use.

What should these countries do?

There should be commitment from all individual range states, who should develop their own National Action Plans. Management activities should be described in these Action Plans, on the basis of the actions that have been presented in this International Action Plan.

How should the Action Plan be implemented?

A Working Group under the Technical Committee of the AEWA should be established for implementation of the Action Plans. Activities mandated to the working group are listed. The plan should be formally adopted at the Second Session of the Meeting of the Parties, which will take place from 26-28 September 2002 in Bonn, Germany, and be reviewed every three years thereafter.

1. Introduction

The Great Snipe has for several years been a Red List species that is highly ranked in a number of international convention and agreements. This implies that specific management requirements are necessary for the Great Snipe and UNEP/AEWA Secretariat has asked BirdLife International to prepare an international conservation plan for this species.

This Action Plan shortly describes and evaluates the ecological status and the political and legislation status of the species throughout its geographical range. It focuses on the possibilities for ensuring the quantity and quality of suitable habitats (particularly during breeding) and the reduction of direct negative influence caused by people (hunting, agricultural activity etc.). One of the main problems in developing an Action Plan for the Great Snipe is the lack of knowledge about the ecology of the species. Because this Action Plan has to be based on available knowledge, we are unable to be as specific as we would like to be. This applies particularly to the migration and wintering conditions. We also include in this Action Plan, therefore, a list of the knowledge we lack, but which is needed to develop an optimal management plan for the Great Snipe.

The successful conservation management of the Great Snipe is the joint and equal responsibility of the governments in the breeding countries, the countries visited during migration and the countries used during wintering. Effective conservation of the population requires the involvement of a range of governmental and non-governmental organisations in all the range countries. International co-operation is required in the implementation of all aspects of the Action Plan.

The general objective of this International Action Plan is:

In the short term (3 years):

1. to maintain the population of Great Snipe at a level that will guarantee it long-term conservation in all its present range.
2. to increase knowledge about the Great Snipe (e.g. habitat use, breeding range and population size particularly for the eastern population, and migration and wintering conditions), in order to increase the effectiveness of the reviewed version of the Great Snipe Action Plan to be produced in 2005.

In the long-term (15 years):

1. to restore the population to a level that will remove the species from the "Near Threatened" list.

In order to reach this objective, the following principles need to be applied:

1. to ensure international co-operation between the range states in joint programmes of monitoring, research, conservation, management, utilisation and liaison for the benefit of Great Snipe, their habitats, and the human populations with which the snipe comes into contact or whose habitat it shares.
2. to control and reduce all human activity which negatively affect the species and its habitat.
3. to fulfil all legal and other relevant obligations, such as the obligations taken up in European legislation (especially the Birds Directive) and international conventions.

The Plan presents operational and measurable objectives, and management options to achieve these objectives. It is a framework to ensure the coherence of, and communication about, the national plans. The framework leaves room for manoeuvre for the range states to tune their management policy to the national situation, as long as the objectives are achieved.

The success of the Action Plan depends to a large extent on:

1. the efforts of the range states to draw up and communicate National Action Plans.
2. implementation aspects such as: a time frame for monitoring and evaluation and for the communication of progress and activities in the different range states, and insight into budgetary consequences.
3. organisational matters such as: a clear vision of the role of the African-Eurasian Waterbird Agreement (AEWA) Technical Committee, and a decision on the potential establishment of a new working group in this committee.

The Plan applies to a period of 3 years, after which it needs to be evaluated and reviewed.

2 Biological Assessment of the Great Snipe

General Information	The Great Snipe (<i>Gallinago media</i>) is a medium-sized migratory wader species that winters in tropical Africa. It is a lekking species that breeds along the tree line in the Scandinavian mountains, and in boreal and bush tundra areas from eastern Poland eastwards to the Yenisey river in Russia. It is a food and habitat specialist that needs relatively open and base-rich habitats with high biomass of invertebrates during the breeding season. The stringent breeding habitat demands make the species's distribution scattered and also vulnerable to environmental changes.
Population Development	The species experienced a dramatic population decline in the period ca.1850 – 1930s, most strongly pronounced in the western part of the breeding range. This was probably due to habitat change brought about by industrial development, changes in agricultural practices and traditional harvesting in lekking arenas (Kålås et al. 1997b). After 1950 the western population, now restricted to areas along the tree line in the Scandinavia mountains, seems to have stabilised, while the population reduction seems to have continued in the eastern range, particularly in the southern and western parts.
Distribution Throughout The Annual Cycle	Birds leave wintering areas from April to May and the southern breeding birds seems to go directly to breeding grounds where lekking starts in late April. The most northern breeding birds probably use more southern/lowland roosting sites while waiting for the breeding areas to become available in early-mid June. Adult birds start leaving their breeding areas in early August, and the juveniles leave in late August/early September. During the autumn migration most birds seem to travel quite rapidly back to tropical Africa, with a few short stopovers along the migration route (Devort & Paloc 1994, but see Meltofte 1993). During the winter most birds stay in inland Africa where they have several stopovers, following the rainy season as it progress southwards, resulting in the use of a large percentage of tropical Africa.
Survival and Productivity	The annual survival rate for adult birds seems to be relatively high (0.6 – 0.7 for a 1987-96 sample from Norway (Fiske et al. ms)). Production is probably quite variable (20-40 % young recruits in the breeding population in a sample from Norway 1987-01 (Kålås, unpubl.)), probably due to: i) fluctuating predator pressure related to small mammal (lemming) cycles in the western population and the northern part of the eastern population, and ii) fluctuating weather condition (eg. dry weather makes food less available, flooding may destroy nests).
Life history	<p>Breeding: A lekking species where males perform a very energetic demanding display in lekking arenas (Höglund et al. 1992) which female visit only to copulate (Höglund & Alatalo 1995). The female alone cares for chicks, feeding them during their first days of life. Their behaviour and habitat use during breeding makes them difficult to detect (Kålås 2000). Clutch size: 4, incubation period: 22-24 days, fledging period: ca. 25 days</p> <p>Feeding: Almost entirely invertebrates. In breeding areas the lekking males demand large quantities of high-quality food (Höglund et al. 1992), and earthworms are the main food item, at least for the western population and for the south-western part of the eastern population (Løfaldli et al.1992, Kuresoo & Luigujõe, unpubl.). Adult insect and larvae (e.g. Diptera and Coleoptera) are also eaten to some extent. There is no information available about winter food.</p> <p>Migration and Wintering: Wintering in tropical Africa. Few extensively used stopover areas between wintering and breeding grounds are known. Seems to travel on a rather directly between tropical Africa and the breeding grounds, particularly during spring migration (Devort & Paloc 1994). Most birds seem to leave Africa in April-early May, and the adult birds return to Africa in the second half of August, while the juveniles seems to arrive in early September (Devort 2000). We have only fragmented information about wintering habits. However, Great Snipe seems to have several stopovers, appearing in ca. 35 countries in tropical Africa covering a belt from Senegal and southern Mali, eastwards to Ethiopia and Kenya and southwards to Zimbabwe, northern Namibia and Botswana. The Ethiopian plateau grasslands seem to be very important for a large percentage of the eastern population, for a two-month period after the birds have arrived in Africa (Massoli-Novelli 1988). Birds seem to follow the wet areas as the rainy season progresses, resulting in the utilisation of the northernmost wintering areas during early and late wintering and the southern areas during mid wintering (Massoli-Novelli 1988, Devort 2000). Moulting data from Africa also indicate that there are two distinct populations (with different moult schedule) which also differ in their use of areas in Africa (Devort 2000).</p>

Habitat requirements	<p>Breeding habitat: The western population inhabits open and base-rich habitats along the tree line (Kålås et al. 1997b), while the eastern population inhabits floodplains, rich fen and meadows in south, and rich fen and shrub areas northwards into the bush tundra (Kålås et al. 1997a). Do often feed in open bush habitats with sedge and grass, but when the soil becomes dry and the earthworms less active, they have to change to more open fen habitats which are usually more damp. During the lekking period males feed close to the lekking arena, while females, with or without chicks, feed in a more scattered manner (Kålås et al. unpubl.). The same kind of feeding habitats are used during the whole breeding season, both for adults and juveniles. Nests are situated in habitats similar to those used for feeding (Løfaldli et al. 1992).</p> <p>Autumn and winter: Solitary, or in small scattered flocks during migration and in winter. The few birds that are observed annually in southern Europe during migration inhabit mainly sedge marshes and meadows. In eastern Europe, birds are also observed along water reservoirs, in rice-fields and in dried fishponds. During winter mainly in marshes and slightly damp short sedge and grass areas. Are also difficult to detect during migration and winter because of cryptic behaviour and the use of habitats with dense ground vegetation (sedge and grass).</p>
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The geographical distribution of the Great Snipe during the year.

Breeding:	Formerly breeding	Migrates through (April-May and August-September):	Winters (early September – early May, the most northern countries early and late in this period and the southern countries in mid-winter):
Russian Fed. Ukraine Belarus Estonia Latvia Lithuania Poland Sweden Norway	Finland, Denmark Germany	Principally all countries situated between the breeding range and the wintering range (e.g. all countries in Mid- and Southern Europe, The countries surrounding the Caspian Sea, The Middle East and Northern Africa. See also Annex II).	Mauritania, Senegal, Gambia, Guinea-Bissau, Guinea, Mali, Sierra Leone, Liberia, Ivory Coast, Ghana, Burkina Faso, Togo, Benin, Niger, Nigeria, Chad, Cameroon, Rep. of Central Africa, Sudan, Ethiopia, Gabon, Dem. Rep. Congo, Congo, Uganda, Kenya, Rwanda, Burundi, Tanzania, Angola, Zambia, Malawi, Zimbabwe, Mozambique, Namibia, Botswana, South Africa. (See also Annex II).

Available key knowledge.

A major problem for the development of an optimal Action Plan for the Great Snipe is the lack of knowledge about the population biology and the ecology of the species. Such knowledge is needed for us to be able to identify which actions will be the most effective (cost vs. benefit) for the conservation of the species, and also to give guidelines where conflicts between human activities and the conservation of the Great Snipe occur (eg. farming practices and intensity). The table also includes estimates for population size for different countries and the relevance of protected areas and established Important Bird Areas (IBA's).

G – Good quantified knowledge; S – Semi-quantified knowledge, qualified guesses; L – Little knowledge; N – No knowledge available; d – probably decreasing.
() indicate that national knowledge can probably be generated by the use of knowledge from neighbouring countries.

	Norway	Sweden	Poland	Estonia	Latvia	Lithuania	Ukraine	Belarus	Russia	Migration*	Wintering**
Breeding population ('pairs') #	5 000-15 000	1 000-2 000	600-800	600-800	200-300	200-400	500-700	4 600-6 000	>250 000		
Number of IBA's where the species breeds	2	3	13	10	6	2	4	8	26		
Proportion of population in IBA's	< 2 %	< 2 %	95 %	35 %	75 %	20 %	25 %	25 %	< 2 %	< 1 %	< 1 %
Proportion of population in protected areas	< 5 %	< 5 %	75 %	25 %	25 %		15 %	20 %	< 2 %	< 1 %	< 1 %
Type of knowledge											
Population biology											
A. Population size	S	S	S	S	S	S	S	S	L	L	L
B. Details of occurrence	S	S	S	S	S	S	S	S	L	L	L
C. Population changes in last 20 years	N	N	N	d	d	d	d	d	N	N	N
Habitat and diet											
A. Habitat use	G	G	(G)	G	G	G	(G)	G	L	S	L
B. Diet	G	(G)	(G)	G	(G)	(G)	(G)	(G)	L	L	N

- **Based on information:** Norway & Sweden (Kålås 2000); Poland (M. Maniakowski, pers. com.); Estonia (A. Kuresoo & L. Luigujõe, pers. com.); Latvia (Aunins 2000); Lithuania (L. Raudonikis, pers. com.); Belarus (E. Mongin pers. com.); Ukraine (G. Gavris, pers. com.); Russia (V. Morozov & S. Fokin, pers. com.).

* - Migration generally includes all countries (ca. 50) situated between breeding areas and tropical Africa.

** - Wintering includes ca. 35 countries in tropical Africa covering a belt from southern Senegal eastwards to Ethiopia and Kenya mainly used in early and late wintering, and southwards to Zimbabwe and northern Namibia and Botswana.

3 Human Activities

This chapter gives an overview of human activities potentially affecting the Great Snipe population and their relevance by country.

Human activities potentially affecting the Great Snipe population can be subdivided into three categories:

1. those potentially directly affecting the Great Snipe population.
2. those affecting the quantity of the habitat (e.g. land claims for urban and industrial developments and agricultural practices).
3. those affecting the quality of the habitat (e.g. agricultural practices deterioration and contamination).

Concerning influence of human activities on the breeding conditions for Great Snipe the population can generally be divided into two parts: i) the southern and particularly the south-western part of the eastern population inhabiting floodplains and meadows, and ii) the Scandinavian and the northern part of the Russian population inhabiting fen and open shrub habitats. Generally speaking it is the first group which is strongly influenced by human activity and which seems to be under immediate threat, while the last group seems to be under less threat by human activity at present.

Factors affecting the species (increasing mortality)

Hunting

The behaviour of the birds makes them very easy to catch while lekking. The species is therefore particularly vulnerable to such harvesting, and this may have accelerated the dramatic population decrease during the first part of the last century. Such harvesting seems to have ceased for the moment. The short flushing distance and short straight-line flight of the birds when flushed makes them also vulnerable to hunting during migration and wintering.

The species is legally protected in all breeding countries with the exception of the Russian Federation, Ukraine and Belarus. In Russia the annual bag is estimated in 32,000 birds each year (80% of which are juveniles) (Sergei Fokin pers. com.), which seems to represent a limited proportion of the breeding population. No bag statistic is available for Ukraine and Belarus. The species is also hunted in Africa and shooting pressure is reported to be high for some areas (locally). The total affect by hunting in Africa is unknown, but at present it is probably of restricted importance.

Common Snipe (*Gallinago gallinago*) hunting can result in some accidental mortality of Great Snipe at the beginning of the hunting season (August and early September). The numbers of foreigner hunters in Eastern Europe aiming at Common Snipe are increasing and these accidents may increase as a result.

Lead shot have been found in Common Snipe stomachs and may represent a threat to the Great Snipe. No data are available, however, since no stomach contents from wintering/passage areas with high hunting pressure have ever been analysed.

Disturbance from tourism / recreation

Recreational activities (e.g. tourism, fishing) may interfere with lekking birds and disturb breeding birds. This seems to be most likely in southern Russia and Ukraine. In Russia pointer-dog training and competitions during the breeding season can also have an effect.

Predation

Human activities in breeding areas can increase the level of predation by facilitating the discovery of nests or increasing the number of predators on nests and chicks (American mink, fox, crow, cats, etc.). In some areas predation pressure is also increased by the presence of introduced alien predators (e.g. American mink, racoon dog).

Factors affecting habitat quantity (habitat loss)

Agricultural activity. The relationship between Great Snipe and human activities is not exclusively negative. As the species needs open fertile areas for breeding, specific types of agricultural activity seem to facilitate breeding conditions (e.g. grazing of floodplain meadows, low grazing pressure in mountain areas) (Løfaldli et al. 1992, Kuresoo & Luigujõe 2000). However, areas more intensively used for agriculture seem to be avoided by breeding Great Snipes.

Land abandonment. Floodplains were traditionally used for hay collection and low intensity grazing. These activities maintained the ideal habitat for the Great Snipe. However, economic and political changes have resulted in many areas being abandoned resulting in floodplains being invaded by bushes and, more recently, by forest. This is currently happening in the Baltic States and Poland, but less so in Belarus, Ukraine and Russia.

Fire. In some meadows fire are started in late spring to promote the growth of new fresh grass. Although lekking birds seem very robust to such disturbance and resilient from moving to new sites, the burning of large areas may reduce nesting opportunities.

Change of land use. In the future, when the economic situation makes agriculture more profitable again, floodplains may be drained and transformed into land for intensive agriculture, and therefore loss of suitable habitat for the species. Intensive grazing would also result in the destruction of nests and/or chicks, as well as changes in vegetation composition and structure. The intensification of agriculture was probably the main reason for the extinction of the species in Germany and Denmark.

Pesticide and fertilisers. Crop protection products are not used in Great Snipe areas, but pesticides and fertilisers from flooding rivers may affect food availability (e.g. earthworms) or promote the growth of bushes on floodplains.

Drainage and flood control. The water regime is the main factor regulating the floodplains. Drainage and flood-control operation result in habitat loss. In Accession countries SAPARD funds are available and used for flood control and "improvements" including drainage and degradation of the floodplains as Great Snipe habitats. Peat extraction often includes drainage and such draining may also make an area unsuitable for Great Snipe.

Hydropower development. Small scale dams for hydropower stations on rivers will have dramatic effects on floodplains. In the Baltic States it is not currently possible, but there are plans to start such activities. In Russia, many hydropower stations in lowland are no longer profitable, and there are plans to dismantle them. In Scandinavia, the energy policy is currently focussed on other energy sources (windmills, oil, gas), but the construction of new dams would have an impact on the species' habitat.

Urban, industrial and tourist development. Riversides are popular for housing and for industrial development. This has an impact both on the extent of the floodplains and on the flood regimes and therefore on the floodplains nearby. The development of ski resorts and their infrastructure (e.g. ski lifts) in Norway and Sweden may result in habitat loss.

Afforestation. Floodplains are under potential threats from afforestation. SAPARD plans for Latvia include funds for transformation of non-profitable agricultural areas into forest. Floodplains may be considered as such land. Poland is subsidising afforestation, and the problem may also develop in Lithuania and Estonia. In this latter country willow (*Salix* sp.) plantations, located along the rivers, are being tested for economical sustainability.

Transport infrastructure. The development of roads and railways built on floodplains will result in their destruction. The crossing of rivers may also result in changes in the hydrological regime of the rivers immediately upstream. Local problems are recorded in Poland and the Baltic states, but they may also occur elsewhere.

Oil & gas extraction/exploitation and transport. The search for fossil fuels and their extraction in Northern Russia would result in habitat loss, although the impact on the species' habitat and population seems to be limited. Along the coast in Lithuania the oil industry has potential for development, and may therefore become a threat to the habitat and population. Pollution from transport accidents (e.g. oil leaking from pipes) would have effects whose importance would be in relation to the location (e.g. near rivers) and quantity of oil spilled.

Habitat management conflict. Management policies for different species may create conflicts among the different species using the wet meadows. Managers should be aware of such conflicts, and management needs to take into consideration the total biodiversity of the managed areas.

Climate change. Climate changes resulting in an elevation of the tree-line in Scandinavia will dramatically reduce the area of suitable habitat for this population. The same will be the case for the Russian bush tundra population if the tree line moves northwards. A reduction of meadows because of a potential increase in forest cover would also dramatically affect the amount of suitable habitats for the Great Snipe. For the floodplains the winter floods are predicted to come early, so the soil will become too dry during breeding time and food will no longer be available when the Great Snipe need it for production of chick.

Factors affecting habitat quality (habitat degradation)

Agricultural practices. Hay collection carried out by machines results in large areas of meadows suddenly becoming no longer suitable for the species, and may significantly increase predation rate. A high density of grazing animals may destroy a significant number of nests and small chicks by trampling them.

Human activities affecting the Great Snipe population and their relevance by country.

H - High relevance, S - Some relevance, N - No relevance, Ph – Potentially high relevance, Ps – Potentially some relevance, () – concern the southern part of the Russian population.

Human activities:	Norway	Sweden	Poland	Estonia	Latvia	Lithuania	Ukraine	Belarus	Russia	Migration*	Wintering**
1. Effects on the species											
Hunting	N	N	N	N	N	N	S	S	S	S	S
Accidentally shot during hunting of other species	N	N	N	S	S	S	S	Ps	Ps	S	Ps
Agricultural activities kill chicks/destroy nests/increase predation rate	N	N	S	S	S	S	H	S	(S)	N	N
Disturbance											
A. Tourism/Recreational use	N	N	N	N	N	N	S	N	(S)	?	?
B Dog training/competitions	N	N	N	N	N	N	N	S	(S)	N	N
Predators facilitated by humans (American mink, racoon-dog, fox, cat, crow etc.)	S	S	S	S	S	S	S	S	(S)	?	?
2. Affecting the quantity of habitats										?	?
Agricultural development											
A. Land abandonment	S	S	H	H	H	H	S,P	S,P	(H)		
B. Intensification	N	N	Ph	Ph	Ph	S,Ph	Ph	Ph	(Ph)		
Afforestation	N	N	Ph	Ph	Ph	Ph	N	N	N		
Drainage and flood control	N	N	S,Ph	S,Ph	S,Ph	S,Ph	S,Ph	S,Ph	(S,Ph)		
Hydropower development	Ps	Ps	Ps	Ps	Ps	Ps	Ps	Ps	(Ps)		
Infrastructural development (e.g. transport)	N	N	Ps	S	Ps	Ps	S	S	(Ps)		
Urban and industrial development	N	N	S	S	S	S	S	S	(S)		
Recreational development (e.g. cabins, ski lifts)	S	S	N	N	N	N	S	N	N		
Oil and gas exploitation (and transport)	N	N	N	N	N	P	S	N	S		
Potential effects of climatic change	Ph	Ph	Ph	Ph	Ph	Ph	Ph	Ph	Ph		
3. Affecting the quality of habitats										?	?
Agricultural practices	S	S	S,Ph	H	H	H	H	H	(H)		
Use of fertiliser and pesticides	N	N	Ps	Ps	Ps	Ps	Ps	Ps	(Ps)		
Contamination such as oil spills, lead shot, chemical pollution, etc.	N	N	S	S	S	S	S	S	(S)		
Deterioration from human activities (as mentioned in categories 1 and 2) in or near habitats	S	S	S	S	S	S	S	S	S		
Conflicting nature management goals	N	N	Ps	Ps	Ps	Ps	Ps	Ps	(Ps)		

*Migration generally includes all countries (ca. 50) situated between breeding areas and tropical Africa.

** Wintering includes ca. 35 countries in tropical Africa covering a belt from southern Senegal eastwards to Ethiopia and Kenya mainly used in early and late wintering, and southwards to Zimbabwe and northern Namibia and Botswana.

4 Policies and legislation relevant for the management of the Great Snipe.

Below we give an overview of relevant national and international policies and legislation. Legislation regarding forestry and agriculture, etc. is not discussed, although it may have a considerable indirect influence on the Great Snipe population.

International policies and legislation. For relevant signatory countries see Annex II.

Title	Work title	Year	Objective and relevance
Convention on Wetlands of international importance, especially as waterfowl habitats	Ramsar Convention	1971	Prevent further destruction of wetland habitats by designating wetlands for inclusion on a list of "Wetlands of international importance". Conservation and wise use of these wetlands. Compensate for loss of wetlands. Consultation about implementation of the Convention.
Convention on the Conservation of Migratory Species of Wild Animals	Bonn Convention	1979	Concerted action for the conservation and effective management of migratory species. Consists of two appendices: Annex I: animals requiring strict protection. Annex II: animals for which agreements need to be made for the conservation and management of these species.
Agreement on the Conservation of African-Eurasian Migratory Waterbirds	AEWA	1999	AEWA is developed under the Bonn Convention. The aim of AEWA is to take co-ordinated measures to maintain migratory waterbird species in a favourable conservation status, or to restore them to such a status. AEWA stimulates the development of international, as well as national, Single Species Action Plans.
Convention on the Conservation of European Wildlife and Natural Habitats	Bern Convention	1979	Conservation of wild flora and fauna and their natural habitats, especially those species and habitats whose conservation requires the co-operation of several states. "Special attention to be given to the protection of areas that are of importance for the migratory species specified in Appendices II and III (incl. most birds) and which are appropriately situated in relation to migration routes as wintering, staging, feeding, breeding or moulting areas".
EU Council Directive on the Conservation of Wild Birds	EU Birds Directive	1979	Conservation of birds and bird habitats by European co-operation. Establish network of protected areas: Special Protection Areas (SPAs). The Birds Directive laid the foundation for the Habitats Directive.
EU Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora	EU Habitats Directive	1992	Establish strategic network (Natura 2000) of European Habitats and protect the most threatened species in Europe. Implementation behind schedule. Countries have to submit lists of "Special Areas of Conservation (SACs)". Two annexes list habitat types and species. The article 6 obligations of the Habitats Directive also have to be implemented in the Special Protection Areas of the Birds Directive.
Convention on Biological Diversity	Biodiversity Convention	1992	Maintain a sustainable diversity and spread of flora and fauna across the world. Each contracting party shall develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity.

NB: The European Directives and international Conventions can have different legal implications. The special legal status of EU Directives makes it possible to enforce implementation through the European Court of Justice, whereas the legal implications of Conventions depend on their translation into national legislation.

Threat and Convention status for the Great Snipe.

World Status ¹	European Status ²	SPEC category ²	EU Birds Directive Annex ³	Bern Convention Annex ⁴	Bonn Convention Annex ⁵	African-Eurasian Migratory Water Bird Agreement ⁶
LR/nt	(V)	2	I	II	II	B1 (Scandinavian breeding population) B2c (Northeast Europe and Western Siberian breeding population)

¹ World Status as in BirdLife International (2000): Categories: C = Critically endangered, E = Endangered; V = Vulnerable; D = Declining; L = Localised; R = Rare; LR = Lower Risk, DD = Data deficient, cd = conservation dependent, nt = near threatened, lc = least concern, S = Secure.

² Tucker G.M & Heath M.F. (1994): (V) – Vulnerable, Status provisional, SPEC category 2 – species whose global populations are concentrated in Europe (> 50%), and which have an unfavourable conservation status in Europe.

³ The species shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.

⁴ Give special attention to the protection of areas that are of importance (Article 4) and ensure the special protection of the species (Article 6). For more details see the Convention text.

⁵ Animals for which agreements need to be made for the conservation and management of these species. For more details see the Convention text.

⁶ B1 - population numbering between ca. 25 000 and ca. 100 000, B2c – population numbering more than ca. 100 000 individuals and considered to be in need of special attention as a result of significant long-term decline.

National policies, legislation and on-going activities

A – significant activity, S - some activity, N - no activity, NA - not applicable, I – included in national Red List, PI – at present not included, but proposed to be included in the national Red List, NI – at present not included in Red List, NH – not huntable, H – huntable, () – concerns a significant proportion of the actual countries.

National policies affecting Great Snipe	Norway	Sweden	Poland	Estonia	Latvia	Lithuania	Ukraine	Belarus	Russia	Migration*	Wintering**
Species											
Legal protection status	I	I	I	I	I	I	PI	PI	NI	(NI)	(NI)
Hunted	NH	NH	NH	NH	NH	NH	H	H	H	(H)	(H)
Start of hunting season () indicates start of hunting season for Common Snipe)	(10 Sept.)	(10 Sept.)	NA	(20 Aug.)	(20 Aug.)	(20 Aug.)	ca 15 Aug.	ca 20 Jul.	ca 5 Aug.		
Research on the species ecology	A	A	S	A	S	S	N	A	N	N	N
Inventories	S	S	S	S	S	S	S	S	N	N	N
Regular population censusing and monitoring	N	N	N	N	S	A	N	N	N	N	N
Natural habitats (proportion of population)	100	100	0	15	0	0	0	25	80		
Site protection	S	S	NA	S	NA	NA	NA	NA	S	S	N
Monitoring use of protected sites	N	S	NA	N	NA	NA	NA	NA	N	N	N
Semi-natural habitats (proportion of population)	0	0	100	80	99	75	100	70	20		
Site protection	NA	NA	S	S	S	S	S	S	S	S	N
Monitoring use of protected sites	NA	NA	N	S	S	S	N	S	N	N	N
Promotion of appropriate policies (agricultural)	NA	NA	N	A	S	S	N	S	N	N	N
Man-made habitats (proportion of population)	0	0	0	5	<1	25	0	5	0		
Promotion of appropriate policies	NA	NA	NA	S	NA	S	NA	S	NA	N	N
International co-operation											
Regular international meetings to discuss research and monitoring #	N	N	N	N	N	N	N	N	N	N	N

The OMPO (Migratory Birds of the Western Palearctic) has for several years supported research on Snipes, including the Great Snipe, in Lithuania, Estonia and Belarus, and have arranged one international workshop on this topic (OMPO 2000).

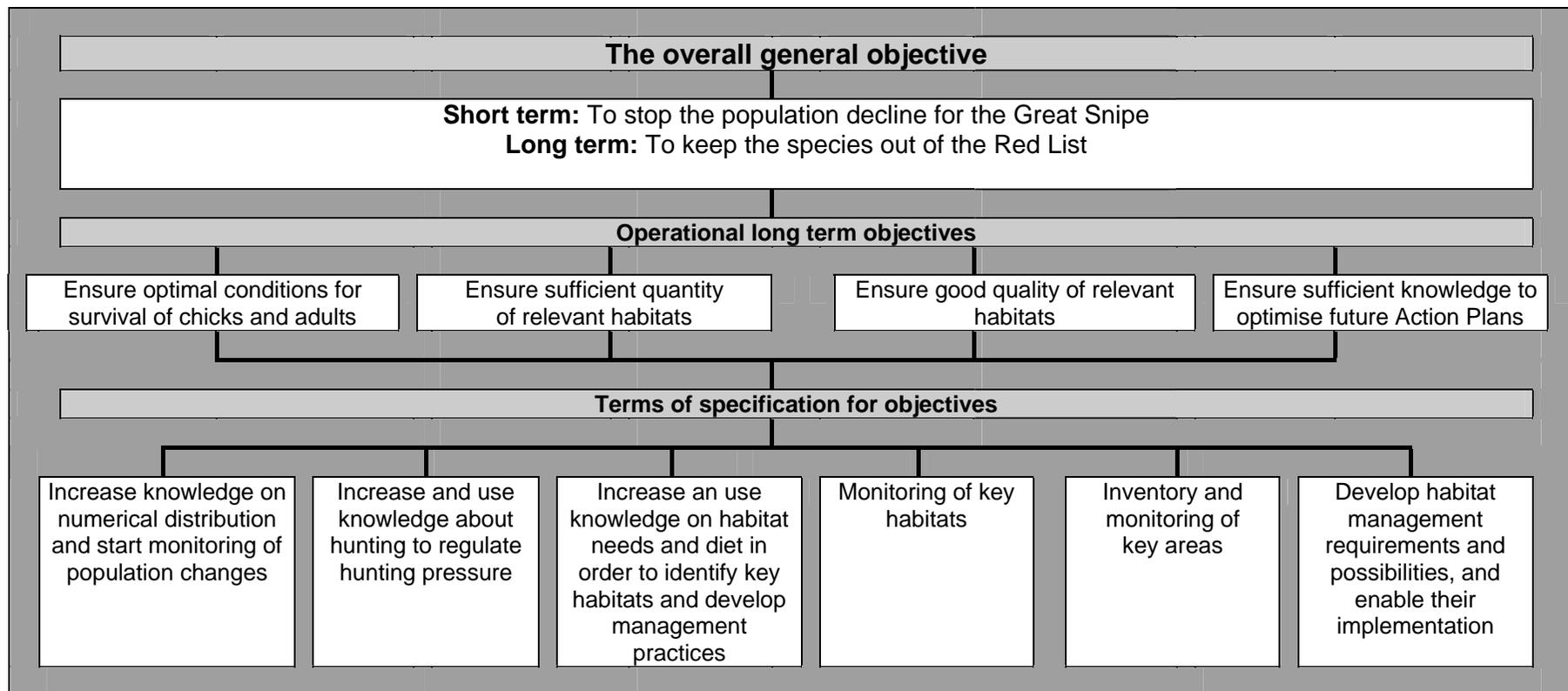
* Migration generally includes all countries (ca. 50) situated between breeding areas and tropical Africa.

** Wintering includes ca. 35 countries in tropical Africa, covering a belt from Senegal eastwards to Ethiopia and Kenya mainly used in early and late wintering, and southwards to Zimbabwe and northern Namibia and Botswana.

5 Framework for Action

The individual countries in the Great Snipe geographical range are responsible for the success of this Action Plan. Without the commitment of the Range States and all interest groups concerned, the Action Plan will remain ineffective. In this chapter the framework of objectives and a list of subjects that need to be taken up in the National Action Plans are presented.

Framework for Action



Measurable objectives

Increase knowledge on numerical distribution and start monitoring of population changes	Increase and use knowledge about hunting to regulate hunting pressure	Increase and use knowledge on habitat needs and diet	Monitoring of key habitats	Inventory and monitoring of key areas	Develop habitat management requirements and possibilities and enable their implementation
<p>Within three years, each country should:</p> <ul style="list-style-type: none"> • Make an inventory of current distribution and population size • Initiate a monitoring programme including population size and production • Identify and quantify threats 	<p>Within three years, each country where hunting is allowed should:</p> <ul style="list-style-type: none"> • produce annual bag statistics for the Great Snipe, including wing collection to get information on variation in fraction of adult birds in the bag. • countries where Great Snipe can be accidentally killed by Common snipe hunters should evaluate the extent of this, and if necessary, delay start of Common Snipe hunting season until the beginning of September. Hunters should also be 'educated' on this topic (e.g. through information booklets about the Great Snipe). 	<p>Within three years, knowledge on habitat use and diet should be increased for:</p> <ul style="list-style-type: none"> • migrating birds • wintering birds • the northern part of the Russian breeding population 	<p>Within three years, each country where the species breeds at present should:</p> <ul style="list-style-type: none"> • make available a map showing the extent and distribution of habitats suitable for breeding. • initiate monitoring of area changes of the extent of these key habitats 	<p>Within three years, each country should have:</p> <ul style="list-style-type: none"> • an updated inventory of key areas • located and determine habitat threats to areas of international importance (Scandinavia, Belarus and Russia: 1 % of breeding population; Poland, Baltic States and Ukraine: 20 males) • give indications of how to conserve or, if necessary improve the status of these areas 	<p>Within three years, each country should:</p> <ul style="list-style-type: none"> • make a listing of international important areas that are threatened by degradation and loss, with the aim of analysing possibilities of preventing them • developing management plans for such important Great Snipe areas

All National Action Plans should include the following with a time-frame:

Part I:

- A national survey of geographical distribution and numbers
- Elaboration of monitoring systems, including population size, production and threats (See chapter 7)
- Evaluate effects of hunting and regulate all hunting where this activity has proved to be or is considered unsustainable
- A quantification of habitat utilisation and diet (particularly relevant for migration, wintering and for the northern Russian breeding population)
- Mapping of the distribution of habitats suitable for breeding and initiate monitoring of area changes of these key habitats
- Identification of key sites (following the IBA criteria, see Annex I)
- A list of international important areas that are threatened by degradation and loss, with the aim of analysing possibilities for preventing them developing management plans for such areas

Part II:

- Public awareness and training plans (e.g. related to population monitoring and management of habitats)
- Survey of existing policies and legislation likely to have an impact on the species or the species' habitat (See chapter 4)
- Survey of relevant human activities (See chapter 3)
- Implementation of monitoring of the Great Snipe population and the most relevant threats to the species
- Survey of present and/or expected threats to areas of national importance
- Proposed management options to deal with these threats (See chapter 5 and 6)
- Overall expected effects of measures taken
- A communication plan (with AEWA, governmental- and non-governmental organisations)

6 Action by country

To assist the Range States in developing their own National Action Plans, in this chapter per Range State objectives and management options are presented in this chapter.

The western breeding population (Norway & Sweden).

International Objective	Priority	National management options / actions	Measurable objective
Increase survival	Low	<ul style="list-style-type: none"> (No exploitation exists) 	
Sufficient quantity of habitats & good quality of habitats	High	<ul style="list-style-type: none"> Maintain the current status of habitat quantity and quality Improve protection status by encouraging a protected status for all sites of international importance for the Great Snipe. For sites of international importance the status of SPA according to the EU Birds Directive (if the site hosts potential habitat for the species, the site has to be identified as an SPA (Birds Directive)) Develop a proper management system for protected sites, through the development of management plans. Measures should be balanced with overall conservation objectives of the protected areas, the Great Snipe being one component among others in the functional system Evaluate possibilities for the maintenance and recovery of habitats 	<ul style="list-style-type: none"> * Protected areas should accommodate 10 % of the national breeding population * Listing of relevant policies and regulations, and actions to minimise conflicts with human activities in future * Inventory of key sites and determination of habitat threats * Develop a management plan, including listing of threatened sites and management needs
Key knowledge needed	High	<ul style="list-style-type: none"> Distribution and population size Population changes Distribution of key habitats 	<ul style="list-style-type: none"> * Update distribution maps and national estimates of breeding population * Develop and run monitoring of the breeding population, habitats and threats * Map the distribution of key habitats

The boreal part of the eastern breeding population (Poland, Lithuania, Latvia, Estonia, Belarus, Ukraine and the southern parts of the Russian Federation)

International Objective	Priority	National management options / actions	Measurable objective
Increase survival	Medium	<ul style="list-style-type: none"> Stop all exploitation of the western part of this population and ensure no over-exploitation of the eastern part of the population 	<ul style="list-style-type: none"> * Ban hunting, and if needed postpone start of Common snipe hunting season until 5 Sept.
A minimum disturbance of the birds	Medium	<ul style="list-style-type: none"> Stop disturbance by Pointing dogs in the breeding season 	<ul style="list-style-type: none"> * Ban Pointing dog training and competitions in Great Snipe habitats in the period 1 May – 1 August
Sufficient quantity of habitats & good quality of habitats	High	<ul style="list-style-type: none"> Maintain or enhance the current status of habitat quantity and quality throughout appropriate management Develop a proper management system for protected sites, through the development of management plans. Measures should be balanced with overall conservation objectives of the protected areas, the Great Snipe being one component among others in the functional system Improve protection status by encouraging a protected status for all sites of international importance for the Great Snipe. For sites of international importance the status of SPA according to the EU Birds Directive (if the site hosts potential habitat for the species, the site has to be identified as an SPA (Birds Directive)) Evaluate possibilities for the maintenance and recovery of habitats 	<ul style="list-style-type: none"> * Protected areas should for Poland, the Baltic States and Ukraine accommodate 50 % and for Belarus 25 % of the national breeding population. For Russia 10 % of the southern breeding population should be accommodated in protected areas. * Listing of relevant policies and regulations, and actions to minimise conflicts with human activities in future * Develop a management plan, including listing of threatened sites and management needs
Key knowledge needed	High	<ul style="list-style-type: none"> Distribution and population size Population changes Distribution of key habitats Habitat use and diet Management practices 	<ul style="list-style-type: none"> * Update distribution maps and national estimates of breeding population * Develop and run monitoring of the breeding population, habitats and threats * Inventory of key sites and determination of habitat threats * Map the distribution of key habitats * Improve knowledge on habitat use and diet * Develop and test management practices

The bush tundra section of the eastern breeding population (northern parts of the Russian Federation)

International Objective	Priority	National management options / actions	Measurable objective
Increase survival	Medium	<ul style="list-style-type: none"> • Ensure no over-exploitation 	* Ensure sustainable harvesting
Sufficient quantity of habitats & good quality of habitats	Medium	<ul style="list-style-type: none"> • Maintain the current status of habitats quantity and quality • Improve protection status by encouraging a protected status for all sites of international importance for the Great Snipe. For sites of international importance the status of SPA according to the EU Birds Directive (if the site hosts potential habitat for the species, the site has to be identified as an SPA (Birds Directive)) 	<ul style="list-style-type: none"> * Protected areas should accommodate 10 % of the national breeding population * Listing of relevant policies and regulations, and actions to minimise conflicts with human activities in future * Inventory of key sites and determination of habitat threats * Develop a management plan, including listing of threatened sites and management needs
Key knowledge needed	High	<ul style="list-style-type: none"> • Distribution and population size • Population changes • Distribution of key habitats • Habitat use and diet 	<ul style="list-style-type: none"> * Update distribution maps and estimates of breeding population * Develop and run monitoring of the breeding population (e.g. bag statistics), habitats and threats * Inventory of key sites and determination of habitat threats * Map the distribution of key habitats * Improve knowledge on habitat use and diet

Formerly breeding countries (Germany, Denmark and Finland).

International Objective	Priority	National management options / actions	Measurable objective
Sufficient quantity and quality of habitats	Low	<ul style="list-style-type: none"> Encourage the re-establishment of former breeding areas by Great Snipe as opportunities permit 	* Listing of policies and regulations
Key knowledge needed	Low	<ul style="list-style-type: none"> Management practices 	* Develop and test management practices

Migration countries (ca. 50 countries including Mid- and Southern Europe, the countries surrounding the Caspian See, the Middle East and North Africa. For more details see Annex II.).

International Objective	Priority	National management options / actions	Measurable objective
Increase survival	Medium	<ul style="list-style-type: none"> Stop exploitation of the western population and the south western part of the eastern population, and ensure no over-exploitation of the Russian population 	<ul style="list-style-type: none"> * Ban Great Snipe hunting in western and southern Europe and western Africa * Quantify the extent of accidentally killing of Great Snipe by Common Snipe hunters, and if needed, postpone start of Common snipe hunting season until the beginning of Sept.
Sufficient quantity of habitats & good quality of habitats	Medium	<ul style="list-style-type: none"> Maintain or enhance the current status of habitats Encourage a protective status for all sites of importance for the Great Snipe. For EU (or accession) countries sites of international importance should be declared SPA according to the EU Birds Directive. For other countries the sites should be included in the Emerald network (Bern Convention) and/or as Ramsar sites. 	* Inventory of key sites and determination of habitat threats
Key knowledge needed	High	<ul style="list-style-type: none"> Distribution and population size Habitat use and diet 	<ul style="list-style-type: none"> * Update distribution maps and national estimates of migration population * Improve knowledge on habitat use and diet

Wintering countries (ca. 35 countries in tropical and southern Africa. For more detail see Annex II)

International Objective	Priority	National management options / actions	Measurable objective
Increase survival	Medium	<ul style="list-style-type: none"> • Stop all over-exploitation 	* Ban hunting or ensure sustainable harvesting
Sufficient quantity of habitats & good quality of habitats	High	<ul style="list-style-type: none"> • Maintain or enhance the current status of habitats. • Encourage a protective status for all sites of importance for the Great Snipe. Sites of international importance should be declared Ramsar sites. 	<ul style="list-style-type: none"> * Inventory of key sites and determination of habitat threats * The Ethiopian plateau grassland seems to be very important for a large fraction of the eastern population during mid Aug. – mid Oct., and the need of a management plan for these areas should be evaluated.
Key knowledge needed	High	<ul style="list-style-type: none"> • Distribution and population size • Habitat use and diet 	<ul style="list-style-type: none"> * Update distribution maps and national estimates of wintering population * Improve knowledge on habitat use and diet

7 Implementation

General preconditions

For the Action Plan to be successfully implemented, agreement on information exchange, communication and monitoring, clarity on necessary financial resources and a realistic time-schedule are a prerequisite. It is most important that individual countries will only consider measures that affect the population after a consultation process with the other involved countries has taken place. The Technical Committee of the AEWA should play a mediating role.

A special working group under the Technical Committee should be established to co-ordinate the implementation of the Great Snipe Action Plan. In this working group breeding and wintering Range States and interests groups should be represented. The Range States have a responsibility for monitoring national achievements, and communicating these to the AEWA Great Snipe Working Group and other Range States. This chapter will describe these essential preconditions for the implementation of the international Action Plan. A key challenge here will be to start necessary action when only one of the countries accommodating breeding Great Snipes has signed the AEWA (see Annex II).

Gap in knowledge

As long as there is a major lack in the fundamental knowledge about the population biology (e.g. details about the breeding range, population size, migration habits, wintering range) and the ecology (e.g. habitat use and diet, particularly outside the breeding season) of the Great Snipe, it is impossible to develop an optimal Action Plan for this species. A main task for the proposed AEWA Great Snipe Working Group should be to encourage the gathering of such knowledge. A population model is also needed for the preparation of reliable national Action Plans in the future, and should therefore be developed. The development of such a model will also identify a set of parameters, for which data are lacking for several of them, and will thereby identify key parameters to be included in the monitoring of the species that has to be initiated.

Monitoring

The success of this Action Plan stands or falls with the commitment of countries to monitor the population and habitats, as well as the effects of management measures on the species. Only if countries demonstrate this commitment, can proper management decisions be made. All countries are requested to initiate a regular population census, a co-operative ringing programme and to start population monitoring (including productivity) (see Kålås 2000, Aunins 2001a). The working group would be vital in organising this work.

Organisation

In the organisation structure of the AEWA, the Agreement Secretariat plays a key role. The Agreement Secretariat co-ordinates the flow of scientific information and technical advice. It also calls for meetings of the AEWA parties. The Technical Committee falls under the Agreement Secretariat. Article VII, paragraph 5 of the AEWA, gives the Technical Committee the possibility of installing working groups for special purposes. This article can be used for the establishment of a Great Snipe Working Group.

Great Snipe Working Group (GSWG)

A special Great Snipe Working Group under the Technical Committee of the AEWA should be established for implementation of this Action Plan.

The GSWG should, under supervision of the Technical Committee and taking into account the role of the Agreement Secretariat, be mandated to undertake the following activities:

- Develop guidelines for population censusing and monitoring, and organise a co-operative ringing programme.

- Develop guidelines for habitat management practices
- Facilitate the development of a population model
- Assist in and co-ordinate the process of National Action Plan preparation.
- Prepare and organise the triennial meeting with actual Range States.
- Prepare and submit a review of the Action Plan to the triennial Range States' meeting and to the AEWA.
- Co-ordinate and facilitate information exchange between Range States (and between the AEWA and the Range States).
- Monitor implementation of the Action Plan through the preparation of an annual report by the WG.
- Collect country data and draft annual reports on the implementation of the Action Plan.
- Organise intermediate meetings with groups of Range States (training, emergency measures, etc.)

The GSWG should consist of a team of several technical advisors. To ensure effective communication between the Technical Committee and the working group, at least one member of the Technical Committee should also participate in the working group.

Detailed Terms of Reference based on the above description of activities will be prepared by the Technical Committee, and endorsed by the Range States before the GSWG starts its work.

Country actions

In all communication between the Range States (Contracting and Non-Contracting to AEWA), the Agreement Secretariat plays a co-ordinating role. To keep communication lines clear, countries should therefore provide information to the Agreement Secretariat. This is intended to ensure that all parties will get all relevant information. In order to implement the Action Plan, the Range State Countries should commit themselves at least to the following points:

- Endorse the Terms of Reference of the working group.
- Endorse this Action Plan.
- Pinpoint focal points, responsible for the communication with the working group and relevant stakeholders in the country.
- Through the Agreement Secretariat, inform the working group about relevant issues in the country.
- Contribute information for the preparation of the annual report by the GSWG
- Prepare, in co-operation with the working group, and based on chapters 5 and 6 of this International Action Plan a National Action Plan in one year's time.
- Implement this National Action Plan.
- Prepare a review of the National Action Plans every three to five years.
- Maintain and further develop adequately funded research and monitoring programmes to deliver key data.

Time frame for monitoring, evaluation and communication

Time path	1 ^e year ↓	2 ^e year ↓	3 ^e year ↓	4 ^e year ↓
Actions	AEWA Technical Committee:	Working group:	Working group:	Working group:
	<ul style="list-style-type: none"> • Approve/endorse the International Action Plan • Prepare Terms of Reference for the Working Group • Facilitate information exchange 	<ul style="list-style-type: none"> • Assist and co-ordinate National Action Plans • Monitor implementation of the national and international Action Plans and prepare annual progress report • Organise workshops/training • Facilitate information exchange 	<ul style="list-style-type: none"> • Monitor implementation of the (national and international) Action Plans and prepare annual progress report • Organise workshops/training • Facilitate information exchange 	<ul style="list-style-type: none"> • Prepare triennial Range States' meeting • Monitor implementation of the national and international Action Plan and prepare three-year reports • Prepare Action Plan review • Organise workshops/training • Facilitate information exchange
	Range States:	Range States:	Range States:	Range States:
	<ul style="list-style-type: none"> • Endorse the International Action Plan • Endorse the Working Group 	<ul style="list-style-type: none"> • Prepare National Action Plan • Implement National Action Plan • Contribute to the annual progress report • Pinpoint national focal point • Contribute to workshops • Exchange information 	<ul style="list-style-type: none"> • Implement National Action Plan • Contribute to the annual progress report • Contribute to workshops • Exchange information 	<ul style="list-style-type: none"> • Implement National Action Plan • Contribute to the three-year reports • Contribute to workshops • Exchange information
	⇓	⇓	⇓	⇓
Products	<ul style="list-style-type: none"> • Endorsed Action Plan • Endorsed Working Group • A Web page for information exchange 	<ul style="list-style-type: none"> • National Action Plans • Range States annual progress report. • Annual progress report on international Action Plan. • National Focal Points • Guidelines for population monitoring • Guidelines for monitoring of key habitats • Information exchange 	<ul style="list-style-type: none"> • Annual progress report on international Action Plan • Information exchange • Guidelines for management practices • A population model • A review of knowledge particularly related to migration and wintering conditions, and to the breeding condition for the Russian population 	<ul style="list-style-type: none"> • Triennial Range States' meeting • Three-year report Range States • Three year report international Action Plan • Information exchange • Reviewed Action Plan

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Glossary

In this Action Plan, the following definitions have been used:

Equilibrium population level - stable level of animal population size, in which birth rate and death rate are equal.

Habitat - environment meeting the conditions required by a particular species.

Natural habitat - environment of a particular species, which has not been changed by human interference; i.e. arctic tundra.

Semi-natural habitat - environment of a particular species, which has been moderately modified by humans; i.c. low grazing pressure by sheep or farmed reindeers in mountain areas and arctic tundra.

Man-made habitat - man-made environment of a particular species; i.e. farmland, mowing and grazing of flood plains.

Feeding areas - areas where animals search for food.

Range States - (independent) countries within the range in which a particular animal species occurs.

Fly-over countries - those Range States which bird species pass by only on migration, without stopping for at least several days.

Wintering grounds - staging grounds during the winter.

Migration staging grounds - staging grounds used during migration.

Key sites - areas which are essential for the survival of a significant part of the population (conform to Ramsar criteria) at any stage of its annual cycle; i.e. for this migratory bird species: breeding grounds, staging areas and wintering sites.

Annex I: Identified European and African Important Bird Areas (IBA's) which classify for the Great Snipe. Data from the BirdLife International World Bird database, accessed in January 2002.

Country	International name	Area (ha)	Lat.	Long.	Year	Season	Min	Max	Units	Quality	Abundance
Belarus	Belovezhskaya Pushcha	87000	52,75	24,07		breeding					
Belarus	Flood-plain of Sozh river	13400	52,67	31,08	1996	breeding	60	120	breeding 'pairs'	medium	frequent
Belarus	Mid-Prityat	100000	52,15	27,00	1995	breeding	50		breeding 'pairs'		rare
Belarus	Vygonoshchanskoe	43000	52,67	26,00	1995	breeding	20		breeding 'pairs'	medium	uncommon
Estonia	Alam-Pedja wetland complex	25850	58,50	26,17	1996	breeding	50	75	breeding 'pairs'	medium	common
Estonia	Kärevere flood-plain meadow	150	58,42	26,52	1999	breeding	15	50	breeding 'pairs'	good	
Estonia	Matsalu Bay	51880	58,75	23,67	2001	breeding	80	100	breeding 'pairs'	good	rare
Latvia	Baltie Klani marshes and adjoining bogs	19329	56,85	26,97	2000	breeding	135	0	breeding 'pairs'	medium	
Latvia	Lake Burtnieks	9148	57,75	25,25	2000	breeding	20	25	breeding 'pairs'	good	
Latvia	Pededze and Sita flood-plain	1721	57,15	26,98	2000	breeding	20		breeding 'pairs'	medium	
Latvia	Ziemeļgauja Floodplain	5683	57,67	26,22	1999	breeding	6		breeding 'pairs'	unknown	
Lithuania	Cepkeliai	11212	53,98	24,50	1998	breeding	10	15	breeding 'pairs'	medium	uncommon
Lithuania	Nemunas delta	26625	55,30	21,25	1999	breeding	30	50	breeding 'pairs'	good	uncommon
Norway	Dovre fjell	50000	62,32	9,45	1989	breeding	400		breeding 'pairs'		
Norway	Hardangervidda	427200	60,20	7,62	1989	breeding	70	100	breeding 'pairs'		
Poland	Biebrza river valley	126047	53,50	22,83	1980	breeding	370		breeding 'pairs'	poor	
Poland	Gródek-Michalowo basin	4700	53,07	23,67	1995	breeding	15	30	breeding 'pairs'	poor	
Poland	Lower Bug river valley	55000	52,32	22,35	1993	breeding	50	60	breeding 'pairs'		
Poland	Narew river gaps	4200	53,12	22,18	1993	breeding	30		breeding 'pairs'		
Poland	Upper Narew river valley	8400	52,92	23,42	1993	breeding	80	110	breeding 'pairs'		
Russia	Adovo-Chugrumski wetland	21000	60,25	53,08	1995	breeding	40	60	breeding 'pairs'		
Russia	Bel'skaya flood-plain	42800	55,08	55,75	1994	breeding	50		breeding 'pairs'	good	
Russia	Central Meshchera lake-system	92700	55,25	40,17	1995	breeding	15	20	breeding 'pairs'	good	
Russia	Dedinivo flood-plain of Oka river	23120	55,17	39,30	1996	breeding	20	50	breeding 'pairs'	poor	
Russia	Faustovo flood-plains of Moscow river	9000	55,40	38,50	1985	breeding	40	50	breeding 'pairs'	medium	
Russia	Flood-plain of Vad river	65600	54,22	42,70	1996	breeding	20	40	breeding 'pairs'	medium	
Russia	Flood-plain of Volkhov river	17650	59,17	31,83	1995	breeding	50	150	breeding 'pairs'	poor	
Russia	Iremel'ski mountain	90000	54,50	59,00	1996	breeding	20		breeding 'pairs'	good	
Russia	Irendyk ridge	150000	53,33	58,50	1996	breeding	100		breeding 'pairs'	good	
Russia	Izhevsk flood-plain of Oka river	30000	54,67	41,00	1996	breeding	150	300	breeding 'pairs'	medium	
Russia	Kamsko-Yayvenski wetland	35000	59,17	56,33	1994	breeding	30		breeding 'pairs'	good	
Russia	Khvarkush and Zolotoy Kamen' ridges	130000	60,25	58,58	1995	breeding		100	breeding 'pairs'		
Russia	Kumikushski wetland	80000	60,33	55,25	1995	breeding	50		breeding 'pairs'	good	
Russia	Lake Ilmen' and adjoining marshy plain	250000	58,25	31,75	1995	breeding	200	300	breeding 'pairs'	poor	
Russia	Mouth of Svir river	65000	60,58	32,93	1995	breeding	10	60	breeding 'pairs'	poor	
Russia	Nizhnekamskaya flood-plain	8000	56,75	53,83	1996	breeding	75		breeding 'pairs'		
Russia	Pereluchski Nature Reserve	6425	58,22	34,60	1991	breeding	20	40	breeding 'pairs'	poor	
Russia	Solotcha flood-plain of Oka river	12000	54,83	39,75	1996	breeding	60	100	breeding 'pairs'	medium	

Annex I. cont.

Country	International name	Area (ha)	Lat.	Long.	Year	Season	Min	Max	Units	Quality	Abundance
Russia	Stakhovski marshes	10296	56,03	32,67	1990	breeding	10	20	breeding 'pairs'	good	
Russia	Upper Mologa river (Verestovo lake)	17000	57,83	36,50	1990	breeding	20	50	breeding 'pairs'	poor	
Russia	Upper Voronezh Forest	92800	53,00	40,08	1996	breeding	10	20	breeding 'pairs'	poor	
Russia	Valley of Sysola river	110000	61,13	50,28	1996	breeding	20	30	breeding 'pairs'	medium	
Russia	Watershed of Tsna and Vysha rivers	16000	54,00	42,00	1996	breeding	10	20	breeding 'pairs'	medium	
Russia	Yamantau mountain	120000	54,33	58,25	1996	breeding	20		breeding 'pairs'	good	
Russia	Yugyd Va	1926489	64,50	58,67	1996	breeding	100	200	breeding 'pairs'	medium	
Russia	Zavidovo Nature Reserve, including 3 fish-ponds	133800	56,37	36,10	1995	breeding	20	30	breeding 'pairs'	medium	
Sweden	Lake Ännsjön-Storlien	90000	63,27	12,55	1996	breeding	25	150	breeding 'pairs'	medium	frequent
Sweden	Taavavuoma	28400	68,50	20,70		breeding	3	10	breeding 'pairs'		
Sweden	Vindelfjällen mountains (including Lake Tärnasjön)	550000	65,90	15,97		breeding	5	10	breeding 'pairs'		
Ukraine	Korotchenkivs'ki meadows	10000	51,93	33,38	1995	breeding	6	20	breeding 'pairs'	medium	common
Ukraine	Mzha river valley	5000	49,75	36,10	1996	breeding	15	25	breeding 'pairs'	medium	
Ukraine	Pryp'yat' river valley	12500	51,87	25,38	1996	breeding	20		breeding 'pairs'	medium	
Ukraine	Styr' river valley (Kolky village)	6600	51,07	25,37	1999	breeding	10	20	breeding 'pairs'	unknown	
Ukraine	Turiya river valley	7900	51,72	24,83	1996	breeding	40	50	breeding 'pairs'		
Ethiopia	Sululta plain		9,20	38,72		passage					
Kenya	Busia grasslands	250	0,42	34,25		passage					uncommon
Norway	Nordre Øyeren and Sørumsneset	7504	59,88	11,15	1995	passage				medium	frequent
Russia	Bulgarski	25000	55,00	49,17	1994	passage	100	150	adults and juveniles	medium	
Russia	Delta of the River Don	53800	47,17	39,42	1997	passage	1000	2000	adults and juveniles	poor	
Russia	North part of Volgogradski reservoir	74250	51,65	46,50	1997	passage	500	1000	adults and juveniles	medium	
Ukraine	Syvash Bay	245000	46,17	34,58	1992	passage	10	200	adults and juveniles	medium	
Kenya	Mau Narok--Molo grasslands	40000	- 0,55	35,92		winter					uncommon
Malawi	Lake Chilwa and flood-plain	220000	- 15,25	35,67		winter					
Mozambique	Gorongosa Mountain and National Park	385000	- 18,42	34,08		winter					
Namibia	Bushmanland (Tsumkwe) Pan System	120000	- 19,62	20,62		winter					
Tanzania	Moyowosi--Kigosi Game Reserves	1300000	- 4,67	31,50	1995	winter	44		adults and juveniles		
Uganda	Queen Elizabeth National Park and Lake George	223000	- 0,17	30,00		winter					
Uganda	Semliki National Park	21900	0,83	30,08		winter					
Zambia	Kasanka National Park	39000	- 12,52	30,22		winter	300	300	adults and juveniles		
Zambia	Barotse flood-plain	600000	- 15,28	23,03		winter	300	300	adults and juveniles		
Zambia	Chisamba	35000	- 15,00	28,25		winter					
Zambia	Chitunta plain	2000	- 11,50	24,38		winter					
Zambia	Hillwood	3200	- 11,25	24,32		winter					
Zambia	Kafue flats	600000	- 15,75	27,27		winter	300	300	adults and juveniles		
Zambia	Kafue National Park	2240000	- 15,38	26,00		winter					
Zambia	Nkanga river conservation area	9700	- 16,62	27,03		winter					
Zambia	Shiwa Ng'andu	9000	- 11,20	31,75		winter					
Zambia	South Luangwa National Park	905000	- 13,03	31,57		winter					
Zambia	West Lunga National Park and Lukwakwa	410000	- 12,83	24,50		winter					

Annex II. Signatory countries for International Conventions that are relevant for conservation of Great Snipe. (x – Member Countries, Acc - Accession Countries).

Country	Function	Ramsar	Bonn	AEWA	Bern	EU	Biodiversity
Belarus	Breeding	x			x		x
Estonia	Breeding	x			x	Acc	x
Latvia	Breeding	x	x		x	Acc	x
Lithuania	Breeding	x			x	Acc	x
Norway	Breeding	x	x		x		x
Poland	Breeding	x	x		x	Acc	x
Russian Federation	Breeding	x					x
Sweden	Breeding	x	x	x	x		x
Ukraine	Breeding	x	x		x		x
Denmark	Formerly breeding at present Migration/Fly-over	x	x	x	x	x	x
Finland	Formerly breeding at present Migration/Fly-over	x	x	x	x	x	x
Germany	Formerly breeding at present Migration/Fly-over	x	x	x	x	x	x
Albania	Migration/Fly-over	x			x		x
Algeria	Migration/Fly-over	x					x
Armenia	Migration/Fly-over	x					x
Azerbaijan	Migration/Fly-over	x			x		x
Belgium	Migration/Fly-over	x	x		x	x	x
Bosnia & Herz.	Migration/Fly-over						
Botswana	Migration/Fly-over	x					x
Bulgaria	Migration/Fly-over	x	x		x	Acc	x
Croatia	Migration/Fly-over	x	x	x	x		x
Cyprus	Migration/Fly-over				x	Acc	x
Czech Rep.	Migration/Fly-over	x	x		x	Acc	x
Egypt	Migration/Fly-over	x	x	x			x
Eritrea	Migration/Fly-over						x
France	Migration/Fly-over	x	x	x	x	x	x
Georgia	Migration/Fly-over	x	x				x
Greece	Migration/Fly-over	x	x		x	x	x
Hungary	Migration/Fly-over	x	x		x	Acc	x
Iran	Migration/Fly-over	x					x
Iraq	Migration/Fly-over						
Israel	Migration/Fly-over	x	x				x
Italy	Migration/Fly-over	x	x		x	x	x
Jordan	Migration/Fly-over	x	x				x
Kazakhstan	Migration/Fly-over						x
Kuwait	Migration/Fly-over						x
Lebanon	Migration/Fly-over	x					x
Libya	Migration/Fly-over	x					x
Liechtenstein	Migration/Fly-over	x	x		x		x
Luxembourg	Migration/Fly-over	x	x	x	x	x	x
Macedonia	Migration/Fly-over	x	x	x	x		
Malta	Migration/Fly-over	x	x		x	Acc	x
Moldova	Migration/Fly-over	x	x	x	x		
Monaco	Migration/Fly-over	x	x	x	x		x
Morocco	Migration/Fly-over	x	x	x	x		x
Netherlands	Migration/Fly-over	x	x	x	x	x	x
Portugal	Migration/Fly-over	x	x		x	x	x
Romania	Migration/Fly-over	x	x	x	x	Acc	x
Saudi Arabia	Migration/Fly-over		x				x
Slovak Rep.	Migration/Fly-over	x	x		x	Acc	x
Slovenia	Migration/Fly-over	x	x		x	Acc	x
Spain	Migration/Fly-over	x	x	x	x	x	x
Switzerland	Migration/Fly-over	x	x	x	x	x	x
Syria	Migration/Fly-over	x					x
Tunisia	Migration/Fly-over	x	x		x		x

Turkey	Migration/Fly-over	x				x		x
Turkmenistan	Migration/Fly-over							x
United Kingdom	Migration/Fly-over	x	x	x		x	x	x
Uzbekistan	Migration/Fly-over		x					x
Yemen	Migration/Fly-over							x
Yugoslav Rep.	Migration/Fly-over	x						
Angola	Wintering							x
Benin	Wintering	x	x	x				x
Burkina Faso	Wintering	x	x			x		x
Burundi	Wintering							x
Cameroon	Wintering		x					x
Centr. Afr. Rep.	Wintering							x
Chad	Wintering	x	x					x
Congo	Wintering	x	x	x				x
Congo, Dem. Rep.	Wintering	x	x	x				x
Cote d'Ivoire	Wintering	x						x
Equatorial Guinee	Wintering	x		x				x
Ethiopia	Wintering							x
Gabon	Wintering	x						x
Gambia	Wintering	x		x				x
Ghana	Wintering	x	x					x
Guinea	Wintering		x	x				x
Guinea Bissau	Wintering	x	x					x
Kenya	Wintering	x	x					x
Liberia	Wintering							x
Malawi	Wintering	x						x
Mali	Wintering	x	x	x				x
Mauritania	Wintering	x	x					x
Mozambique	Wintering					x		x
Namibia	Wintering	x						x
Niger	Wintering	x	x	x				x
Nigeria	Wintering	x	x					x
Rwanda	Wintering							x
Senegal	Wintering	x	x	x		x		x
Sierra Leone	Wintering	x						x
South Africa	Wintering	x	x	x				x
Sudan	Wintering							x
Tanzania	Wintering	x	x	x				
Togo	Wintering	x	x	x		x		x
Uganda	Wintering	x	x					x
Zambia	Wintering	x						x
Zimbabwe	Wintering							x

Annex III. Contributors (commenting on drafts, information, observations etc.)

Name	Organisation	Area	Related to	Comments
Umberto Gallo Oris	BirdLife Europe		Organiser, BirdLife	Workshop participant
Jaanus Elts	Estonian Orn. Soc.	Estonia	Organising Workshop	Workshop participant
Anders Kalamees	Estonian Orn. Soc.	Estonia	Organising Workshop	
John Atle Kålås	Norw. Inst. Nature Res.	Norway	Compiler	Workshop participant
Des Callaghan	BirdLife International		BirdLife Database	
Bernt Lenten	UNEP, Germany		General comments	
Kariuki Ndong'ang'a	National Museum Kenya	Kenya	General comments	
Ainars Aunins	Latvian Fund for Nature	Latvia	Breeding	Workshop participant
Gleb Gavis	Ukrainian Acad. Sci.	Ukraine	Breeding and migration	Workshop participant
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Jacques Franchimont	ABC Representative	Morocco	Migration	
Dan Munteanu	Romania Orn. Soc.	Romania	Migration	
Elchin Sultanov	-	Azerbaijan	Migration	
Derek Scott	-	Iran	Migration	
Michel Devort	-	France and Africa	Migration and wintering	
Ranier Massoli-Novelli	-	Italy and Ethiopia	Migration and wintering	
Guy-Noël Olivier	OMPO	France and Africa	Migration and wintering	
Joost Brouwer	Brouwer Env. & Agr. Cons.	Africa	Wintering	
Tim Dodman	-	Africa	Wintering	
Liz & Neil Baker	Tanzanian Bird Atlas	Tanzania	Wintering	
Albert Beintema	Alterra	Mali	Wintering	
Nik Borrow	-	Gabon	Wintering	
Anthony Cizek	-	Zimbabwe	Wintering	
Patrick Claffey	-	Benin	Wintering	
Will Duckworth	-	Gabon	Wintering	
Pete Leonard	-	Zambia	Wintering	
Heimo Mikkola	FAO Repr.	Gambia	Wintering	
Nigel Redman	Christopher Helm	Kenya	Wintering	
Ian Sinclair	Vanga Tours	Namibia, Zimbabwe	Wintering	
Eddy Wymenga	A & W Ecol. Consultants	Mali	Wintering	