

NATIONAL REPORT FOR THE AQUATIC WARBLER MOU AND ACTION PLAN

This reporting format is designed to monitor the implementation of the Action Plan associated with the Memorandum of Understanding Concerning Conservation Measures for the Aquatic Warbler *Acrocephalus paludicola*. Reporting on the Action Plan's implementation will support information exchange throughout the range and assist the identification of necessary future actions by the Signatories. The questions presented here go beyond the scope of information already requested from CMS Contracting Parties for national reports to the CMS Conference of the Parties.

GENERAL INFORMATION

<p>Which agency or institution has been primarily responsible for the preparation of this report?</p> <p>Agency for Nature and Forests, of the Flemish Government</p>
<p>List any other agencies, institutions, or NGOs that have provided input:</p> <ul style="list-style-type: none"> • Natuurpunt (NGO for nature conservation) • Royal Belgian Institute of Natural Sciences – the Belgian Bird Ringing Scheme
<p>Reports submitted to date:</p> <p>1</p>
<p>Period covered by this report:</p> <p>from <u>01/04/06</u> to <u>01/04/10</u> (dd/mm/yyyy) (dd/mm/yyyy)</p>
<p>Memorandum in effect in Signatory State since (dd/mm/yyyy):</p> <p>24/11/2005</p>
<p>Designated Focal Point (and full contact details):</p> <p>Sarah Roggeman Agency for Nature and Forests Central Services Koning Albert II-laan 20 bus 8, 1000 BRUSSELS Tel. 02-553 82 80 Fax 02-553 81 05 E-mail: sarah.roggeman@lne.vlaanderen.be</p>

OBJECTIVES

1.0 POLICY AND LEGISLATIVE

1.1. *To promote national and international broad policies and legislation which favour the conservation of the Aquatic Warbler and its habitat*

1.1.1. *Promote the full protection of the Aquatic Warbler and its habitats through national and international legislation*

- a) Is the Aquatic Warbler protected under national legislation in your country?
- [Yes, the species is protected and protection level is sufficient](#)
 - Yes, the species is protected, but protection level is not sufficient
 - No, the species is not protected
- b) If Yes, please describe the state of protection and limitations and conservation responsibilities this protection status imposes on the state, conservationists and land-users.

1981-2009: Direct protection was secured by the Royal Executive Decision of September 9, 1981, on the protection of birds in the Flemish Region. This Decision protects all species naturally occurring within the European Union, thus including the Aquatic Warbler.

2007: an Action Plan was made for the Aquatic Warbler in Flanders (see attachment, only in Dutch). In this plan an overview of the appearance in Flanders is given. Also the vegetation structure of the used biotopes was studied. The plan includes a list of possible conservation measures, a proposition of monitoring and a list of other protected species that can profit from the implementation of conservation measures taken for the Aquatic Warbler.

2009-... : Direct protection is secured by the Decree of the Flemish Government of May 05, 2009, regarding the protection and management of species in the Flemish Region. This Decree protects all species naturally occurring within the European Union, thus including the Aquatic Warbler. The Decree is a partly implementation of the Birds Directive.

2009: The reference conservation situation for Flanders is expressed in a proposal for Nature Conservation Objectives (NCO). There are Regional NCO (R-NCO) that indicate the general conservation status of the species and the goals for conservation. The R-NCO are general conservation objectives for the complete region of Flanders. The proposal is put to the Minister for approval.

R-NCO Aquatic Warbler (AW)

AW in Europe: moderate important

The Aquatic Warbler is the most threatened songbird in Europe and is admitted to Annex I of the Birds Directive. This species breeds in Eastern-Europe and Western-Asia. The world population is estimated on 13.000 to 19.000 male birds, spread over a limited number of breeding sites. They overwinter in Western-Africa, south of the Sahara desert.

The passage period in the fall is situated above the small strip over Western- and South-western-Europe, which includes Flanders. The fall passage appears to happen in small tracks, making the resting areas on their way of great importance. In spring it is possible that the birds follow a more eastern route.

In comparison with other Western-European countries on the passage routes a relatively large number of Aquatic Warblers is found in Flanders, from which we may suspect that Flanders is an important region on the passage route of the threatened bird. Belgium is one of the countries within the geographical range of the species that subscribed the Memorandum of Understanding. The NCO's for the Aquatic Warbler are based on the Action Plan for Flanders (Van Hove et al., 2007).

Regional Conservation Status: unfavourable - bad

* **Area:** unknown. Aquatic Warblers are seen and ringed in the whole area of Flanders, with the emphasis on river valleys and the costal region in Western Flanders. Yet it is not clear to which extend ringing and spotting efforts influence the spreading pattern. About possible trends of the distribution area is not much known.

* **Population:** unknown. The number of observations rose suddenly mid eighties with the change of the bird ringing technique (use of sound during the night to lure migrating birds into the nets). In Belgium there are since 1986 yearly by average seen or ringed 70 birds. The exact trend of the number of migrating Aquatic Warblers in Flanders is not known, but it is probably a reflection of the general population trend (=declining).

* **Habitat:** unfavourable – adequate. During the period of passage the species appears mainly close to water, as well as along the costal area as on the main land, especially in river valleys and estuaries with *Carex*, *Juncus* or *Phragmites* vegetation. The most important areas where the Aquatic Warbler is not lured with sound have big *Carex* vegetations as their main habitat. These habitats are spread over Flanders and are partly (<50%) protected areas. Recently a number of protected areas were lost (int. al. in Zeebrugge).

* **Future perspectives:** unfavourable – bad. The species will profit from the nature developing projects along rivers, in harbor areas and to a lesser extent along the coast. This can compensate the loss of some suitable biotopes during the past years. On the other hand, the conservation status of the total European population stays unfavourable-bad and thus the future perspectives for the bird are uncertain.

Conservation Objectives

* Conservation and where possible expansion of the present area of marsh vegetations in Flanders (in particular big *Carex* vegetations). Possibilities of expansion are actually situated in the estuary of the river Schelde (Sigmaphan) and within the harbor area of Antwerp. Possibilities in the costal area have to be researched.

* Give actual, not protected habitats of the Aquatic Warbler a better protection as a guarantee for their conservation.

* Improvement of the quality of the surrounding habitat:

- Tune management of suitable habitats in to the habitat needs of the species.

Quantification of the Conservation Objectives

The application of the methods to quantify the proposed objectives for conservation doesn't necessitate any extra habitat surface for this species.

Areas of priority

Due to the small and unpredictable numbers of this rare migration bird it makes no sense to create Special Protection Areas on the basis of observations and bird ringing numbers. The efforts for conservation of the species are best concentrated in the existing areas in which a suitable habitat can be created (in and outside SPA's). Examples of existing areas are: Schorren en Polders van de Beneden-Schelde (BE2301336), Durme en Middenloop van de Schelde (BE2301235), Ijzervallei (BE2500831), Poldercomplex (BE2500932), Westkust (BE2500121), Het Zwin (BE2501033), Krekengebied (BE2301134), De Dijlevallei (BE2422315), De Demervallei (BE2223316) en het vijvercomplex van Midden-Limburg (BE2219312) met aansluitend De Maten (BE2200626).

- c) If the Aquatic Warbler is not protected or protection level is not sufficient, please describe what your country is planning to do to ensure highest possible protection of the species.
- d) Is there national legislation in place in your country that ensures effective protection of Aquatic Warbler habitat (breeding, stop-over and wintering sites), including prevention of potentially detrimental activities (drainage, mineral extraction, industry, etc.).

Yes No

- e) If Yes, please provide details.

The Flemish Government Decision of October 17, 1988 for the designation of Special Protection Areas in the sense of article 4 of the EU Birds Directive 79/409/EEC, has designated 23 such Special Protection Areas (SPA's) in total in Flanders. The total area covered by these SPA's is 97.745 hectares.

The actual protection of the areas designated by the above mentioned decisions is included in the Nature Conservation Decree of October 21, 1997 (in short: the Nature Conservation Decree), as changed on July 19, 2002. The purpose of this decree is the development of a Flemish Ecological Network. It is a considerable progress for a better and more efficient nature conservation policy in Flanders, including the conservation of species of international importance, Birds Directive Special Protection Areas (SPA's) and wetland areas.

This legislation covers the protection of habitats for birds in general. They are not specifically aimed at the Aquatic Warbler and its habitats. This is partly explained by the rarity of the species and the short duration of its stay within the national borders during some weeks on autumn migration. However, along the way, this general legislation does provide the protection tools for bird habitat of which the Aquatic Warbler can profit as well.

More specifically, the following provisions of the Nature Conservation Decree are relevant in this respect:

- Article 2, 20° specifies the definition of wetlands: areas with marsh, fens, bogs and other water areas, of natural or artificial origin, with a temporary or lasting character, with stagnant or running

water, fresh, brackish or salt, including sea water, of which the depth is less than 6 meter at low tide.

- Article 13 § 1, 1° stresses that the Flemish Government can take all necessary nature conservation measures in a number of designated areas for the protection, the conservation, the development and the restoration of natural and semi-natural habitats and ecosystems, including wetlands.
- Article 13 § 1, 3° stresses that the Flemish Government can take all necessary nature conservation measures for the protection, the conservation and the development of the native wild fauna and flora and for migrating wild animals and their habitats.
- Article 18: hydrological management measures to be taken in the Flemish Ecological Network includes the reduction of drying out threats for these areas, the restoration of natural areas that have dried out, and the management of watercourses for the conservation and rehabilitation of their natural values, in a way that areas outside the Network do not undergo disproportionate effects.
- Article 19: The Flemish Government decides about the projects, plans or activities with direct hydrological effect on areas of the Network, for which the initiator or the watercourse manager concerned is required to carry out hydrological studies, in collaboration with the Institute of Nature Conservation, including the ecological effect, with a view to take effective measures and to achieve a better balance of effects with the present and potential natural elements.
- The preservation, restoration and/or adjusting of natural elements of high natural quality of the hydrological regime, such as the water quality, the water quantity and the natural structure of watercourses and their peripheral areas in a way that the surrounding areas outside the Network do not undergo disproportionate effects.

Beside the R-NCO (section 1.1.1.b.) the Specific NCO (S-NCO) are under construction. The S-NCO are Nature Conservation Objectives for each Special Protection Area (SPA) and each Special Area of Conservation (SAC). The Aquatic Warbler will be present in the S-NCO reports of 11 SPA's.

- f) If No, please describe measures taken to ensure protection of Aquatic Warbler breeding habitats.

1.1.2. Seek national or international policy incentives to maintain suitable farming practices at breeding sites which are impacted by drainage or threatened by succession

Are there any national or international policy incentives to maintain suitable farming practices at breeding sites in your country (agro-environmental schemes, etc.)?

Yes No [Country is outside of breeding range](#)

If yes, please describe briefly the nature of the incentives and whether they are effectively applied or used by farmers and land-managers.

If no, please describe what measures are being taken to ensure availability of such incentives.

2.0 SPECIES AND HABITAT PROTECTION

2.1. To promote adequate protection of the breeding sites and remove key factors adversely affecting the breeding habitat

[Country is outside of breeding range](#)

2.1.1. Seek designation as protected areas of all sites regularly holding breeding Aquatic Warblers.

a) In the table attached (Annex I), please provide details for all regularly occupied Aquatic Warbler breeding sites in your country and indicate their protection status (*please expand the table if necessary*).

b) If Aquatic Warbler breeding sites currently are not fully protected or protection level is not sufficient, please provide information about constraints and what your country is planning to do to ensure full and adequate protection of these sites.

- c) If Site Management Plans have not been developed for all Aquatic Warbler breeding sites, please describe what hampers development of Management Plans and what your country is doing to ensure development, approval and implementation of Site Management Plans for regular Aquatic Warbler breeding sites.
- d) Please advise what assistance you would require to complete or improve existing Site Management Plans.

2.1.2. *Prevent habitat alteration, habitat fragmentation, pollution and other factors that could be detrimental to the Aquatic Warbler in its breeding sites*

- a) Are new *development* projects that could potentially have a detrimental effect on current or potential Aquatic Warbler breeding sites (such as drainage, peat extraction, construction of highways, etc.) subject to environmental impact assessment in your country?

Yes No [Country is outside of breeding range](#)

- b) Have there been any potentially detrimental projects *implemented* in any Aquatic Warbler habitat in your country since signing this Memorandum of Understanding?

Yes No

- c) If yes, indicate sites involved, give details and describe the outcome of impact monitoring if available.

- d) Has implementation of any potentially detrimental project in any Aquatic Warbler habitat in your country been *halted* since signing this Memorandum of Understanding?

Yes No

- e) If Yes, please give details.

2.2. ***To manage the breeding habitat to increase numbers, productivity and distribution***

2.2.1. *Regulate water levels and restore natural water conditions*

- a) Has water management been implemented at Aquatic Warbler breeding sites in your country?

Yes No [Country is outside of breeding range](#)

- b) If Yes, please describe actions taken, sites involved and effects expected/achieved.

- c) What constraints are limiting implementation of these activities at other sites in need of effective water management?

2.2.2. *Prevent natural succession of the vegetation by undertaking management where necessary*

- a) Has vegetation management been undertaken at Aquatic Warbler breeding sites in your country to prevent natural succession?

Yes No [Country is outside of breeding range](#)

- b) If Yes, please describe actions taken (mowing, bush-removing, etc), what equipment was used for vegetation management and how efficient it was. Please refer to reports if available and comparative analysis of different types of equipment if it was conducted.

- c) If No, what constraints are limiting vegetation management at other sites where it is needed and what is your country doing to ensure proper vegetation management at Aquatic Warbler breeding sites?

2.2.3. *Hand-scything and mowing*

- a) If historical information is available, please describe to which extent current Aquatic Warbler breeding sites were hand scythed and mown.
- b) Are hand-scything and mowing being applied for habitat conservation for the Aquatic Warbler in your country?
 Yes No [Country is outside of breeding range](#)
- c) If Yes, please describe how this was approached, which sites were involved and the area covered. Please provide details if conservation effect of hand-scything and mowing has been evaluated. Please refer to published materials if available.
- d) What constraints are limiting hand-scything and mowing at sites where extensive habitat management is needed?

2.2.4. *Controlled burning*

[Country is outside of breeding range](#)

- a) Is controlled burning a legal habitat management tool in your country?
 Yes No
- b) If Yes, is burning used as a habitat management tool for Aquatic Warbler? Please describe actions taken, sites involved and effects achieved or expected. Please refer to published materials if information regarding the effects of controlled burning has been summarized and published.
- c) If No, then what actions are being undertaken to legalize controlled burning?

2.2.5. *Grazing*

- a) Has grazing been used for habitat management at Aquatic Warbler breeding sites in your country?
 Yes No [Country is outside of breeding range](#)
- b) If yes, please describe which animals are used, which sites are involved and what effects are expected/achieved. Please give reference to published materials if information regarding the effects of grazing has been summarized and published.

2.2.6. *Disseminate habitat management recommendations to land managers*

- a) Are Aquatic Warbler habitat management recommendations being disseminated to land managers and other interested parties in your country?
 Yes No [Country is outside of breeding range](#)

- b) If Yes, please describe ways of dissemination of habitat management recommendations to land managers used: events, publications, etc. Please give reference to published materials.
- c) If No, then what constraints are limiting dissemination of habitat management recommendations and what should be done to overcome these constraints?
- d) Please advise if there is successful experience other Range States can draw on and what assistance your country would require to help share this information.

2.3. *To protect the Aquatic Warbler and its habitat in the winter quarters and along the migration route*

2.3.1. *Promote the protection and appropriate management of wintering and passage sites*

a) In the table attached (Annex I), please provide details about major Aquatic Warbler passage and wintering sites in your country (*please expand the table if necessary*)

- b) Are primary Aquatic Warbler passage/wintering sites appropriately managed in your country?

Fully Partially No

One of the most important known passage sites (Harbour area of Zeebrugge) was destroyed by harbour development in the late nineties.

The current most important site (decantation pits of Veurne) is threatened by the stopping of the land use. In conclusion, no areas are currently managed specifically for this species.

- c) Please list on-going and implemented projects and provide brief information about results achieved.
- d) What are the remaining gaps and what is your country planning to do to ensure sufficient protection and management of primary passage/wintering sites?

[See section 1.1.1.](#)

2.4. *To restore habitats for the Aquatic Warbler*

2.4.1. *Undertake the ecological restoration of potential breeding sites*

- a) Have potential or irregularly occupied Aquatic Warbler breeding sites in your country been evaluated?

Fully Partially No [Country is outside of breeding range](#)

- b) If Yes, what initiatives aimed at ecological restoration of potential breeding sites have been undertaken in your country? Which sites are involved and what effects are expected/achieved?
- c) If No, what are the constraints and which actions should be taken in order to overcome these constraints?

3.0 MONITORING AND RESEARCH

3.1. *To develop and implement a monitoring programme enabling population trends to be tracked*

3.1.1. *Distribution of a methodology for counting Aquatic Warblers*

- a) Is the methodology adopted for counting Aquatic Warblers used on the national level *different* to what is advised in the Aquatic Warbler Species Action Plan?

Yes No No methodology is adapted

- b) If Yes, please describe briefly possible differences and amendments.

The vast majority of passing Aquatic Warblers in Belgium are detected by bird ringing. This research is not really species specific, but the species is caught along with other species.

Trapping of small passerines in Belgium is conducted by the use of tape luring, which brings the birds down at the end of their nocturnal migration, by dawn. Thus, they are trapped in mist nets placed among the vegetation. In Veurne, Zwevegem (Keibeek) and on the site in Zeebrugge, when it still existed, this technique is systematically used.

This technique could be expanded to other sites.

- c) Does your country have experience applying this methodology and what can be learned from this experience?

The method of trapping birds for scientific causes by tape luring has been invented in Belgium.

It is an excellent technique to study the migration routes of the species and to refine the knowledge of these routes. Refuelling strategies at stopover sites can also be studied.

Until now, some birds of Polish origin have been controlled in Belgium through this technique. Subsequent recoveries of Belgian ringed birds came from England, France, Spain and Poland.

- d) What does your country do to distribute and familiarize relevant institutions/specialists with this methodology?

The technique is only spread into the Belgian ringing community. Some efforts were done to prove that it is completely harmless to the species and that it has no significant negative influence on the continuation of migration.

3.1.2. Undertake national surveys to estimate breeding populations

- a) Have national (all-country) surveys of Aquatic Warbler breeding population been undertaken in your country?

Yes (give years) _____
 No
 Country is outside of breeding range

- b) If Yes, what methodology is used (full counts, transect counts, etc.) and what organization was coordinating the survey?

- c) What is the size and trend of the national breeding population (vocalizing males)? Please refer to published materials if applicable.

Country is outside of breeding range

Year of survey:	Year of survey:	Year of survey:
Population size:	Population size:	Population size:

- d) If Yes, to which extent was the territory of your country covered by the survey:

Fully (> 90 % of suitable habitats surveyed)
 High (60-90 % of suitable habitats surveyed)
 Medium (30-60 % of suitable habitats surveyed)
 Low (< 30 % of suitable habitats surveyed)

- e) When is the next national (all-country) survey of the Aquatic Warbler planned in your country?
- f) If no national surveys have been conducted, please indicate existing constraints and what you country going to do to ensure that national surveys of the Aquatic Warbler are conducted?

3.1.3. *Collect data at the major known passage sites and identify further resting sites*

- a) Have studies at known Aquatic Warbler passage sites been conducted in your country?

Yes No

- b) If Yes, please describe briefly, which major passage sites are being monitored, what monitoring is being conducted (Aquatic Warbler population, habitat parameters, impact assessment, migration strategy, etc) and which organizations are involved?

* Species-specific research has been conducted on one passage site, the decantation pits of Veurne, West-Vlaanderen province. This was done by a bird ringer connected to the Belgian Ringing Scheme.

Several aspects have been researched:

- Trends in the numbers of passage birds
- Phenology
- Migration strategy
- Breeding success, through the establishment of adult-juvenile ratios.

The results of this research have not been published yet. This would take place in a study that is planned on the status of the species in Flanders.

* More general research on the species has been gathered through the work of the Belgian Ringing Scheme. The trapping was not specifically aimed at the Aquatic Warbler, but the species was caught along in the process. The information gathered this way is of course not as extensive as the specific study mentioned above.

It mainly involves the determination of the number of passage birds, with information on phenology gathered along the way.

* In the Action Plan for the AW in Flanders 32 passing sites are monitored on biotope, surface, management, and property structure.

- c) What are the main findings and what conservation implications do they have?

A study is planned to analyse the data which have been gathered throughout the years, both at the site of the species-specific research as through the more general research of the Belgian Ringing Scheme. This study should clarify the situation of the species in the country.

In general, the Aquatic warbler is currently known as a rare and scarcely detected passage migrant, almost exclusively on autumn migration and almost exclusively in Flanders, the northern part of Belgium. The species is a rarity in Wallonia, the southern part of the country. The situation in Flanders is thus very much what can be understood as the situation for Belgium as a whole.

The vast majority of birds in Belgium are only seen in the hand by bird ringers, with field sightings lagging far behind. The birds are trapped during the general ringing efforts that are conducted to trap migrant passerines, especially during the trapping of other warblers of the *Acrocephalus* genus.

In the period 1960-2009, a total of 1.403 birds have been caught by bird ringers connected to the Belgian Ringing Scheme. Almost 95 % of these birds have been trapped since 1987, in accordance with increased attention from the species by individual ringers. Bumper years, with a big effort to trap the species were 1989 and 1990, with 197 and 285 Aquatic warblers ringed respectively.

No quantity data are currently available on field sightings of Aquatic Warblers.

During the period of passage the species appears mainly close to water, as well as along the coastal area as on the main land, especially in river valleys and estuaries with *Carex*, *Juncus* or *Phragmites* vegetation. The most important areas where the Aquatic Warbler is not lured with sound have big *Carex* vegetations as their main habitat.

- d) If Yes, to what extent are major known Aquatic Warbler passage sites are being monitored in your country?

- Fully (> 90% of known sites)
- High (60-90 % of known sites)
- Medium (30-60 % of known sites)
- Low (< 30 % of known sites)

f) To what extent have major Aquatic Warbler passage sites been identified in your country?

- Fully (> 90 % of suitable habitats surveyed)
- High (60-90 % of suitable habitats surveyed)
- Medium (30-60 % of suitable habitats surveyed)
- Low (< 30 % of suitable habitats surveyed)
- No monitoring is conducted

g) What are the gaps and what is your country doing to address them?

There is still insufficient knowledge of the sites which are important for this species on migration.

Currently, nothing is being done to fill up this gap.

3.1.4. *Identify major wintering areas*

a) Have studies aimed at identifying Aquatic Warbler wintering areas have been conducted in your country?

- Yes No Country is outside of wintering range

b) If Yes, what are the main findings and conservation implications? If available, please refer to published reports.

c) If Yes, To what extent was the territory of your country covered by the survey of wintering areas?

- Fully (> 90 % of suitable habitats surveyed)
- High (60-90 % of suitable habitats surveyed)
- Medium (30-60 % of suitable habitats surveyed)
- Low (< 30 % of suitable habitats surveyed)

d) If wintering sites have been identified, to what extend are these sites being monitored during migration?

- Fully (> 90% of known sites)
- High (60-90 % of known sites)
- Medium (30-60 % of known sites)
- Low (< 30 % of known sites)
- No monitoring is conducted

e) If your country is outside of Aquatic Warbler wintering range, which international initiatives aimed at identification of Aquatic Warbler wintering grounds has your country been involved in? What are the main findings?

f) What are the gaps and what needs to be done to help address them?

3.1.5. *Research into habitat characteristics at migration and wintering sites*

a) Has research into habitat characteristics at migration and/or wintering sites been conducted in your country?

- Yes No

- b) If Yes, please provide a list of on-going and completed studies with references if results are already published.
- c) What are the main findings and conservation implications?
- d) What are the remaining gaps and what needs to be done to address them?

A study is made in which information can be gathered about habitat preferences of stop over birds.

3.1.6. *Research on movements during the breeding season / exchange of subpopulations*

Has research on Aquatic Warbler movements during breeding season/exchange of subpopulations been conducted in your country?

Yes No Country is outside of breeding range

If Yes, please describe which territories were covered, what methods were used (colour ringing, radio-tagging, etc.) and what were the main findings. Please give reference to published materials if available.

If Yes, was the research on movements during the breeding season coordinated with researchers from neighbouring Aquatic Warbler Range States.

Yes No

If the research hasn't been conducted, what is your country planning to do to initiate such cooperation?

3.1.7. *Develop and implement an international monitoring programme*

Is your country participating in development and/or implementation of international Aquatic Warbler monitoring programmes?

Yes No

The research on Aquatic Warbler is not species-specific but is a part of the national ringing scheme research effort. As such, it can not be considered to be a part of a species-specific monitoring programme.

So far, no studies have been published on this.

If Yes, please list on-going and completed projects and indicate which areas they focus on and which other countries are involved. Please provide reference to published results if available.

Are there areas that haven't been properly addressed, if so, what needs to be done to assist your country in addressing these gaps?

3.2. *To promote research useful for the conservation of the Aquatic Warbler in the future*

3.2.1. *Undertake comparative studies on breeding success and population recruitment in different habitats*

- a) Have studies on breeding success and population recruitment in different habitats been conducted in your country?

Yes, in collaboration with other Range States

- Yes, on the national scale
- No comparative studies have been conducted
- [Country is outside of breeding range](#)

b) If available, please list on-going and completed studies and give reference to published reports.

At the decantation pits of Veurne passage site (see higher 3.1.3 b), information has been gathered on adult-juvenile ratios.

c) What are the main findings of these studies?

The information has been thoroughly analysed but is not published yet.

d) Are there any future comparative studies your country is able to initiate? What would be needed to do this?

e) If no comparative studies are being implemented, what is your country planning to do to stimulate this research and what assistance would be required?

3.2.2. *Assess the effect of burning, scything, mowing, grazing and water conditions on breeding populations*

a) Effect of which of the following factors and potential habitat management techniques on Aquatic Warbler breeding population was assessed in your country?

- Controlled burning
- Scything
- Mowing
- Water conditions
- Other _____ (what)
- No assessment has been conducted

b) What are the main findings and conservation implications? If available, please give reference to published reports.

c) Are there any gaps? What limits further assessment of this factor's effects?

3.2.3. *Develop collaborative research and monitoring programmes between range-states*

a) Is your country involved in international collaborative and monitoring programmes on the Aquatic Warbler?

Yes No

b) If yes, please provide brief details about on-going and completed projects. Which Aquatic Warbler range states are involved? What fields studied?

There has been some collaboration with foreign researchers, however, by the ringer active at the only species-specific research site in Veurne. These contacts were casual and not under any actual international monitoring programme. It involved the taking of blood samples from birds trapped on migration, by researchers from Germany. The purpose of this research was on genetics.

*The results are published in the Phd thesis of Benedikt Giessling (Univ. Köln): Gießing B (2002) Viele Väter für eine Brut – vorteilhaft oder unausweichlich für das Weibchen? Zum Paarungssystem und zur Populationsgenetik des Seggenrohrsängers (*Acrocephalus paludicola*). University of Cologne, PhD thesis.*

- c) What are the main findings and conservation implications?
- d) What are the gaps and what is needed to address them?

4.0 PUBLIC AWARENESS

4.1. *To ensure development of a strong network of organisations and individuals committed to the conservation of the Aquatic Warbler*

- a) Does a network of organisations/individuals committed to the conservation of the Aquatic Warbler exist in your country?
 Yes No
- b) If Yes, how broad is this network and what organizations/individuals are taking the lead in facilitation and coordination of its development?
- c) What actions does your country undertake to broaden the circle of organisations and individuals committed to conservation of Aquatic Warbler?
- d) What successful experience can other Range States draw on?
- e) What would be needed to establish a network if it does not already exist or to improve an existing one?

4.2. *To use the Aquatic Warbler as a flagship species*

Has the Aquatic Warbler been used as a flagship species in your country for the inventory and protection of wetlands?

Yes No

If Yes, please briefly describe how and provide examples if available.

If No, what limits promotion and use of the Aquatic Warbler as a flagship species and how does your country plan to address this?

The Aquatic Warbler is only a rare passage bird in Flanders, which is almost exclusively detected through scientific bird trapping. The rarity of the species makes it a difficult candidate for flagship purposes.

4.3. *To prepare educational materials promoting and giving information*

- a) Have any educational and promotional materials about Aquatic Warbler been developed in your country?
 - Yes, specifically devoted to the Aquatic Warbler.
 - Yes, the Aquatic Warbler is included into materials with a broader context.
 - No, Aquatic Warbler is not covered in educational and promotional materials.

If Yes, please describe the nature of such materials and how they were disseminated. Please give reference to published materials if available.

If No, please describe what limits development of such materials and give details about what your country is planning to do to promote Aquatic Warbler and its conservation.

The Aquatic Warbler is only a rare passage bird in Flanders, which is almost exclusively detected through scientific bird trapping. The rarity of the species and its secretive habits make it a difficult candidate for any kind of education or promotion.

PART II. COUNTRY-SPECIFIC ACTIONS

Please report on the implementation of the country-specific actions listed for your country in Part II of the Action Plan and provide information if that is not already covered by your answers under Part I. Please describe not only the measures taken but also their impact on the Aquatic Warbler or its habitat in the context of the objectives of the Memorandum of Understanding and the Action Plan. Where you have already answered on country-specific actions in Part I, please only add a reference to the relevant answer here.

[See above for information on this.](#)

Annex I

Name of the site, geographical coordinates	Status (B – breeding, W – wintering P – passage)	Aquatic Warbler population supported (vocalizing males (breeding) or individuals (migration or wintering))	Year of survey	Total area of the site	Area of the site under protection	Type of protection	Does protection level fully reject possible detrimental developments? [Yes/No]	Site Management Plan (D – developed, A - approved, I – implemented)
Lapscheure – Blauwe Sluis	P	Annual: 1-28 Total: 136	1976-2009	2 ha	Yes	Nature reserve SPA BE2500932	Yes	?
Oorderen – De Kuifeend	P	Annual: 1-11 Total: 53	1976-2009		Yes	SPA BE2300222	Yes	?
Veurne – decantation pits	P	Annual 3-83 Total: 682	1988-2009	40 ha	No	/	No	/
Zwevegem - Keibeekbekken	P	Annual: 1-21 Total: 30	2005-2009	3 ha	No	/	No	/