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*“Beyond 2020: Shaping flyway conservation for the future”*

**GUIDANCE ON TAKING A SYSTEMATIC APPROACH TO RESPONDING TO  
WATERBIRD DECLINES: A CHECKLIST OF POTENTIAL ACTIONS**

*(Compiled by the Technical Committee)*

A fundamental obligation of AEWA Parties is to restore the status of waterbirds in an unfavourable conservation status to a favourable condition: “*Parties shall take co-ordinated measures to maintain migratory waterbird species in a favourable conservation status or to restore them to such a status.*” (Agreement text Article II, emphasis added). Declines may occur at various scales from international (affecting an entire biogeographic population), to local – related to bird populations occupying a small area or site.

This document complements other AEWA Guidance and provides an overall framework that may assist Parties and others in planning responses to declines. More detailed guidance on species conservation processes is provided by IUCN’s *Guidelines for Species Conservation Planning* (IUCN 2017<sup>i</sup>).

This current framework is designed to be applicable at multiple scales, from international (for example in addressing factors operating across more than one country) to more local situations. It is based on an adaptive management approach (Figure 1) and draws heavily on the approach to develop and implement International Single Species Action Plans (ISSAP) (UNEP/AEWA Secretariat 2015<sup>ii</sup>). However, the checklist may also be of value in situations where it is not possible to develop full, internationally endorsed Action Plans, or where actions are needed for multiple species.

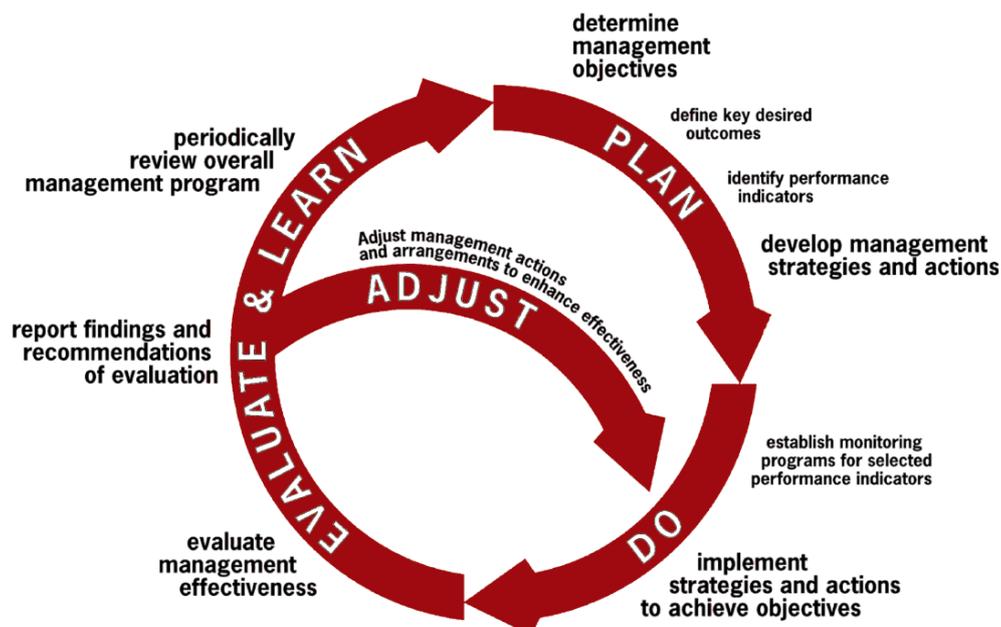


Figure 1. Adaptive approaches to conservation management, a general approach to conservation planning that is valuable in multiple situations

Section 1 provides an overall framework for a process to address declines, from diagnosis of drivers of change, through to identification of remedial actions, followed by implementation, and with monitoring of outcomes throughout. This is a typical approach, adopted and promoted in multiple other conservation planning frameworks (e.g. Sutherland 2000<sup>iii</sup>; IUCN-SSC 2017<sup>1</sup>).

Section 2 provides, for a wide range of potential conservation interventions, an overview of useful methodologies and guidance documents. Alongside these, reference is made to particularly useful published case studies illustrating good/best practice, and from which further insights may be drawn.

## **SECTION 1. A SYSTEMATIC APPROACH TO ADDRESSING WATERBIRD DECLINES**

### **Take a systematic, evidence-based approach to responding to waterbird declines**

1. Convene a task group or other network of experts at an appropriate scale to assist in development of actions. [See Section 2 of IUCN 2017]
2. Assemble available information on causes of declines. Include traditional knowledge as appropriate. [See Section 1, chapter 4 of IUCN 2017]
3. Undertake a formal science-based threats analysis to diagnose the causes of declines, in particular, seeking to identify the stage of the annual cycle and thus the likely geographic areas where negative factors are operating. [See Section 1, chapter 4 of IUCN 2017]
4. Identify and prioritise those issues that are the most likely main drivers of population decline, if necessary using scientific surveys.

### **Develop and agree a clear statement of needs to steer necessary conservation actions**

5. Identify and prioritise those factors, the reduction of which is most likely to benefit the species concerned.
6. Document threats and responses in the form of plan with clear objectives, actions and targets<sup>1</sup>.
7. As appropriate, obtain necessary resources to implement actions.

### **Seek assistance in implementing necessary actions**

8. Review membership of task group or other network so it is best able to assist in promoting implementation of actions. Different types of expertise might be useful to help implement actions.
9. Implement actions, as necessary through stakeholders (see Section 2). [See Section 1, chapter 6 of IUCN 2017]

### **Monitor, review and adjust outcomes**

10. Monitor outcomes of interventions. [See Section 1, chapter 6 of IUCN 2017]
11. Review and adjust actions in the light of outcomes. [See Section 1, chapter 7 of IUCN 2017]

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<sup>1</sup> The AEWA format for International Single and Multi-species Action Plans provides a useful framework.



Conservation intervention	Guidance on methodology or approach	Good case studies
Cumulative Impact Assessment	Guiding Principles for Cumulative Impacts Assessment in offshore wind farms ( <a href="#">EN</a> )	
<b>Create protected areas</b>  Ramsar Sites  Other types of protected areas	Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> )  Ramsar Handbook 17. Designating Ramsar Sites ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> )  Worboys et al. 2015. <i>Protected area governance and management</i> <sup>iv</sup>  Marine Protected Areas ( <a href="#">EN</a> )  IUCN 2011. Guidelines for Protected Area legislation. ( <a href="#">EN</a> )  SANBI Biodiversity stewardship <a href="http://biodiversityadvisor.sanbi.org/industry-and-conservation/biodiversity-stewardship/">http://biodiversityadvisor.sanbi.org/industry-and-conservation/biodiversity-stewardship/</a>	UK: development of a national protected area network ( <a href="#">EN</a> ) Ausden & Hirons 2002. Grassland nature reserves for breeding waders <sup>v</sup> EWT's biodiversity stewardship projects: <a href="http://www.ewt.org.za/stewardship.html">http://www.ewt.org.za/stewardship.html</a>
<b>Manage protected areas</b>	Ramsar Handbook 18. Managing wetlands ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> )  <a href="#">Wetland Management Planning. A guide for site managers.</a>  Ramsar Sites Management Toolkit ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> )  Ausden 2004. Habitat management <sup>vi</sup>  Sutherland 2000. <i>The Conservation Handbook: Research, Management and Policy</i> <sup>iii</sup>  IUCN 2008. <i>Managing marine and coastal protected areas. A toolkit for South Asia.</i> ( <a href="#">EN</a> )  Sutherland & Hill 1995. <i>Managing habitats for conservation</i> <sup>vii</sup>	See multiple studies summarised in <a href="#">Bird Conservation. Global evidence for the effects of interventions</a> (Chapters 5 and 10)

Conservation intervention	Guidance on methodology or approach	Good case studies
	Worboys et al. 2015. <i>Protected area governance and management</i> <sup>iv</sup>	
Peatland Wet grasslands  Grasslands  Reedbeds	Conserving Bogs: The Management Handbook ( <a href="#">EN</a> ) RSPB 1997. <i>The Wet Grassland Guide</i> <sup>viii</sup> RSPB 2005. Wet Grassland Practical Manual: breeding waders ( <a href="#">EN</a> ) SANBI 2013. Grasslands Ecosystem Guidelines: landscape interpretation for planners and managers. Compiled by Cadman, M., <i>et al.</i> South African National Biodiversity Institute, Pretoria. 139 pp RSPB Reedbed management handbook ( <a href="#">EN</a> )	RSPB 1997. The Wet Grassland Guide – includes 15 case studies
<b>Respond to changes at protected areas</b>	For Ramsar Sites, consider Montreux Record listing and/or requesting Ramsar Advisory Mission as means of seeking assistance	Ramsar Advisory Missions ( <a href="#">EN</a> ) ( <a href="#">FR</a> )
<b>Ensure wider habitat in appropriate ecological condition</b>  Agri-environment programmes	Ramsar Handbook 1. Wise use of wetlands ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> ) Ramsar Handbook 2. National wetland policies ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> )	Wilson et al. 2007. Effectiveness of agri-environment schemes in England <sup>ix</sup>
<b>Maintain wetland hydrology</b>	Ramsar Handbook 1. Wise use of wetlands ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> ) Ramsar Handbook 8. Water-related guidance ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> ) Ramsar Handbook 10. Water allocation and management ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> )	
<b>Restore degraded or lost habitats</b>  Lakes	Eiseltová 1994. Restoration of Lake Ecosystems <sup>x</sup>	See multiple studies summarised in <a href="#">Bird Conservation. Global evidence for the effects of interventions</a> (Chapter 11)

Conservation intervention	Guidance on methodology or approach	Good case studies
<p>Saltmarshes and inter-tidal mudflats</p> <p>Gravel pits and mineral workings</p> <p>Peatlands</p> <p>Wetlands</p>	<p>RSPB 2005. Saltmarsh creation handbook: guide to creating saltmarsh and intertidal mudflat. (EN only)</p> <p>RSPB 1993. Gravel pit restoration for wildlife. (EN only)</p> <p>Conserving Bogs: The Management Handbook (<a href="#">EN</a>)</p> <p>Ramsar Technical Report on peatland restoration 2018. (EN) (FR)</p>	<p>Working for wetlands <a href="https://www.environment.gov.za/projectsprogrammes/workingfowetlands">https://www.environment.gov.za/projectsprogrammes/workingfowetlands</a></p> <p>WWF Mondi Wetlands Programme <a href="http://www.wwf.org.za/what_we_do/freshwater/mwp/">http://www.wwf.org.za/what_we_do/freshwater/mwp/</a></p>
<b>Control aquatic Alien Invasive Species</b>	<p>Hussner et al. 2017. Management and control methods of invasive alien freshwater aquatic plants: A review<sup>xi</sup> (<a href="#">EN</a>)</p> <p>South Africa – ARC. Management of invasive alien plants (<a href="#">EN</a>)</p> <p>US FWS. Managing invasive plants. Concepts, principles and practices (<a href="#">EN</a>)</p> <p>IUCN. Alien Invasive Species in Africa’s wetlands. Some threats and solutions (<a href="#">EN</a>)</p>	<p>See multiple studies summarised in <a href="#">Bird Conservation. Global evidence for the effects of interventions</a> (Chapter 12)</p> <p>Water Hyacinth <i>Eihornia crassipes</i> control (<a href="#">EN</a>)</p>
<b>B. Protect species</b>		
<b>Ensure legal protection</b>	<p>AEWA Conservation Guidelines 15. Guidelines on National Legislation for the Protection of Species of Migratory Waterbirds and their Habitats (<a href="#">EN</a>) (<a href="#">FR</a>)</p>	<p>Davis 1998. Crane conservation techniques<sup>xii</sup></p>
<b>Address and eliminate illegal killing, taking and trade</b>	<p>Plan of Action to Address Bird Trapping Along the Mediterranean Coasts of Egypt and Libya (<a href="#">EN</a>) (FR)</p> <p>EU Roadmap towards eliminating illegal killing, trapping and trade of birds (<a href="#">EN</a>) (FR) (ES)</p>	<p>2016 - Illegal use of poisoned baits. Legal analysis and investigation (<a href="#">EN</a>)</p> <p>Brochet, A.-L. et al. 2016. Scope and scale of illegal killing and taking of birds in the Mediterranean (<a href="#">EN</a>)</p>

Conservation intervention	Guidance on methodology or approach	Good case studies
	<p>Tunis Action Plan 2013-2020 for the eradication of illegal killing, trapping and trade of wild birds (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>Programme of work 2016-2020 for the Intergovernmental Task Force on illegal killing, taking and trade of migratory birds in the Mediterranean (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>Scoreboard to assess the progress in combating illegal killing, taking and trade of wild birds (IKB). A self-assessment framework for national use (<a href="#">EN</a>) (<a href="#">FR</a>) (<a href="#">ES</a>)</p> <p>CMS/COP11/Doc.23.1.2 Review and Guidelines to prevent the risk of poisoning to migratory birds (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>International Consortium on Combating Wildlife Crime 2012. <i>Wildlife and Forest Crime Analytic Toolkit</i>. Revised edition (<a href="#">EN</a>)</p>	<p>Brochet, A.-L. et al. 2017. Illegal killing and taking of birds in Europe outside the Mediterranean (<a href="#">EN</a>)</p>
<p><b>Ensure any hunting is sustainable</b></p> <p>Replace toxic lead gunshot with non-toxic alternatives</p>	<p>AEWA Conservation Guidelines 5. Guidelines on Sustainable Harvest of Migratory Waterbirds (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>Runge <i>et al.</i> 2004. Exploitation<sup>xiii</sup></p> <p>Waterbirds &amp; Wetland Recreation Handbook (<a href="#">EN</a> only)</p> <p>AEWA 2009. <i>Non-toxic shot. A pathway towards sustainable use of the waterbird resource</i>. AEWA Technical Series No. 3. (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>AEWA 2009. <i>Phasing out the use of lead shot for hunting in wetlands. Experiences made and lessons learned by AEWA Range States</i> (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>CMS/COP11/Doc.23.1.2 Review and Guidelines to prevent the risk of poisoning to migratory birds (<a href="#">EN</a>) (<a href="#">FR</a>)</p>	<p>Francis et al. 1998. Restrictive harvest regulations affect duck survival<sup>xiv</sup></p>
<p>Hunter education</p>		<p>Noer et al. 2007. Reducing wounding from shotgun hunting<sup>xv</sup></p>

Conservation intervention	Guidance on methodology or approach	Good case studies
Create refuges to reducing hunting disturbance	Waterbirds & Wetland Recreation Handbook ( <a href="#">EN</a> only)	Fox & Madsen 1997. Principles of refuge design to reduce hunting disturbance <sup>xvi</sup> Madsen 2008. Effect of waterfowl hunting refuges <sup>xvii</sup> Evans & Day 2002. Effectiveness of waterfowl refuges <sup>xviii</sup>
Harvest management to allow population recovery and maintenance of favourable status	AEWA Conservation Guidelines 5. Guidelines on Sustainable Harvest of Migratory Waterbirds ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) AEWA Guidance on implementing harvest management through domestic legal regulations (EN)	AEWA Taiga Bean Goose ISSAP ( <a href="#">EN</a> only)
<b>Ensure any trade is sustainable</b>	AEWA Conservation Guidelines 6. Guidelines on regulating trade in migratory waterbirds ( <a href="#">EN</a> only) CITES Guidance ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> )	
<b>Address by-catch and eliminate mortality from fisheries</b>	Much relevant guidance from the CMS Agreement on the Conservation of Albatrosses and Petrels	See multiple studies summarised in <a href="#">Bird Conservation. Global evidence for the effects of interventions</a> (Chapter 8)
<b>Reduce unnecessary mortality</b>  Energy infrastructure	AEWA Resolution 6.12 Avoiding additional and unnecessary mortality for migratory waterbirds ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) AEWA Resolution 6.11. Addressing impacts of renewable energy deployment on migratory waterbirds ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) AEWA Conservation Guidelines 11. Guidelines on how to avoid, minimize or mitigate impact of infrastructural developments and related disturbance affecting waterbirds ( <a href="#">EN</a> only) AEWA Conservation Guidelines 14. Guidelines on How to Avoid or Mitigate Impact of Electricity Power Grids on Migratory Birds in the African-Eurasian Region ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) AEWA Conservation Guidelines 8. Reducing crop damage, damage to fisheries, bird strikes and other	See multiple studies summarised in <a href="#">Bird Conservation. Global evidence for the effects of interventions</a> (Chapter 7) Jenkins et al. 2010. Review of avian collisions with power lines <sup>xix</sup> ESKOM-Endangered Wildlife Trust Strategic Partnership <a href="https://www.ewt.org.za/WEP/eskom.html">https://www.ewt.org.za/WEP/eskom.html</a>

Conservation intervention	Guidance on methodology or approach	Good case studies
	<p>forms of conflict between waterbirds and human activities (<a href="#">EN</a>)</p> <p>CMS/AEWA Guidance on renewable energy technologies and migratory species: guidelines for sustainable deployment (Doc. AEWA/MOP 6.37) (<a href="#">EN</a>) (<a href="#">FR</a>)</p>	
<p>Poison baits and poisoning resulting from the use and/or abuse of agricultural chemicals</p> <p>Pollution control</p>	<p>CMS/COP11/Doc.23.1.2 Review and Guidelines to prevent the risk of poisoning to migratory birds (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>AEWA Conservation Guidelines 2. Guidelines on identifying and tackling emergency situations for migratory waterbirds (<a href="#">EN</a> only)</p>	<p>See multiple studies summarised in <a href="#">Bird Conservation. Global evidence for the effects of interventions</a> (Chapter 13)</p>
<p><b>Predator control (including invasive non-native species)</b></p>	<p><i>The GWCT Mink Raft.</i> Game &amp; Wildlife Conservation Trust (<a href="#">EN only</a>)</p> <p><i>Building a GWCT Mink Raft.</i> Game &amp; Wildlife Conservation Trust (<a href="#">EN only</a>)</p> <p>GCL 1994. <i>Predator Control.</i> Game Conservancy Ltd. (EN only)</p> <p><i>Fox Snares: Guidance for the User.</i> Game &amp; Wildlife Conservation Trust (<a href="#">EN only</a>)</p> <p><i>Hints for using Larsen traps.</i> Game &amp; Wildlife Conservation Trust (<a href="#">EN only</a>)</p> <p>FDC 2010. <i>Le Guide du Piéteur.</i> Fédérations Nationale des Chasseurs de France, Issy-les-Moulineaux. (FR only)</p> <p>Saulnier, J.-C. 2010. <i>L'Incontournable du Piéteur.</i> Edition Chasse-Sports, Le Mesnil le Roi. (FR only)</p> <p>Gavard-Gongallud, N. &amp; Lêmelse, J. 2010. <i>1000 Trucs et Astuces du Piéteur.</i> Editions Chasse-Sports, Le Mesnil le Roi. (FR only)</p>	<p>Moore et al. 2003. Mink <i>Mustela vison</i> eradication in Scotland<sup>xx</sup> (<a href="#">EN</a>)</p> <p>Thompson 2006. Floating rafts to trap mink<sup>xxi</sup></p> <p>Ratcliffe et al. 2008. Modelling Mink <i>Mustela vison</i> management options<sup>xxii</sup></p> <p>Bryce et al. 2011. Community participation in mink control<sup>xxiii</sup></p> <p>Ausden &amp; Hiron 2011. Anti-predator fences increases wader productivity<sup>xxiv</sup></p> <p>Reynolds et al. 2013. Mink control on rivers<sup>xxv</sup></p> <p>Fasola &amp; Roesler 2016. Invasive predator control for rare bird conservation<sup>xxvi</sup></p> <p>Niemczynowicza et al. 2017. Control of mink predating wader nests<sup>xxvii</sup></p> <p>Fletcher et al. 2010. Impacts of legal predator control on ground-nesting birds<sup>xxviii</sup></p> <p>Management of invasive Raccoon Dog <i>Nyctereutes procyonoides</i> in NE Europe (<a href="#">EN</a>)</p> <p>Control of Mink (<a href="#">EN</a>)</p>

Conservation intervention	Guidance on methodology or approach	Good case studies
	<p>Review of cat eradication from islands (<a href="#">EN</a> only)</p> <p>Review of invasive rodent eradication from islands (<a href="#">EN</a> only)</p>	
<b>Disease control and responses</b>	<p>Ramsar Wetland Disease Manual. WWT (<a href="#">EN only</a>)</p> <p>World Organisation for Animal Health (OIE) &amp; International Union for Conservation of Nature (IUCN) 2014. <i>Guidelines for Wildlife Disease Risk Analysis</i>. OIE, Paris. 24 pp. Published in association with IUCN and the Species Survival Commission. (<a href="#">EN</a> only)</p> <p>Ramsar Handbook 4. Avian influenza and wetlands (<a href="#">EN</a>) (<a href="#">FR</a>) (<a href="#">ES</a>)</p> <p><i>Wild bird highly pathogenic avian influenza surveillance</i>. FAO Animal Production and Health Manual 4. 2006 (<a href="#">EN</a> only)</p> <p><i>Wild birds and avian influenza</i>. FAO Animal Production and Health Manual 5. 2007 (<a href="#">EN</a> only)</p>	
<b>Control animal Alien Invasive Species</b>	<p>Action Plan for the eradication of the Ruddy Duck in the Western Palearctic (<a href="#">EN</a>) (<a href="#">FR</a> summary only)</p> <p>AEWA Conservation Guidelines 10. Guidelines on Avoidance of Introductions of Non-native Waterbird Species (<a href="#">EN</a>)</p>	Ruddy Duck eradication in the UK ( <a href="#">EN</a> )
<b>Conservation management of highly threatened species</b>	<p>Jones 2004. Conservation management of endangered birds<sup>xxix</sup></p> <p>Sutherland 2000. The Conservation Handbook: Research, Management and Policy<sup>iii</sup></p>	
Captive breeding	Jones 2004 <sup>xxix</sup>	See multiple studies summarised in <a href="#">Bird Conservation. Global evidence for the effects of interventions</a> (Chapter 16)
Re-establishment and translocation	IUCN. Guidelines for Reintroductions and Other Conservation Translocations ( <a href="#">EN</a> )	Common Crane in: Soorae 2016 <sup>xxx</sup>

Conservation intervention	Guidance on methodology or approach	Good case studies
	AEWA Conservation Guidelines 13. Guidelines for the Translocation of Waterbirds for Conservation Purposes: Complementing the IUCN Guidelines ( <a href="#">EN</a> ) ( <a href="#">FR</a> )	See multiple studies summarised in <a href="#">Bird Conservation. Global evidence for the effects of interventions</a> (Chapter 15)
Management of disturbance	Waterbirds & Wetland Recreation Handbook ( <a href="#">EN</a> only)	
<b>C. Regulate and manage human activity</b>		
<b>Communicate with stakeholders</b>	<p>Communication, Education and Public Awareness (CEPA) (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>Mainstreaming biological diversity. The role of communication, education and public awareness (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>Ramsar Handbook 5. Partnerships (<a href="#">EN</a>) (<a href="#">FR</a>) (<a href="#">ES</a>)</p> <p>Ramsar Handbook 6. Wetland CEPA (<a href="#">EN</a>) (<a href="#">FR</a>) (<a href="#">ES</a>)</p> <p>Waterbirds &amp; Wetland Recreation Handbook (<a href="#">EN</a> only)</p>	Byers 2003. Education, Communication and Outreach success stories <sup>xxxii</sup> ( <a href="#">EN</a> ) – includes case studies on divers, geese, ducks and seabirds
<b>Raise awareness of the wider public</b>	<p>Communication, Education and Public Awareness (CEPA) (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>AEWA Communication Strategy (<a href="#">EN</a>) (<a href="#">FR</a>)</p> <p>Ramsar Convention’s Programme on communication, capacity building, education, participation and awareness (CEPA) 2016-2024 (<a href="#">EN</a>) (<a href="#">FR</a>)</p>	See multiple studies summarised in <a href="#">Bird Conservation. Global evidence for the effects of interventions</a> (Chapter 3)
<b>Seek high-level and political support</b>	Sutherland 2000. The Conservation Handbook: Research, Management and Policy <sup>iii</sup>	
<b>Review laws and policies</b>	AEWA Conservation Guidelines 15. Guidelines on National Legislation for the Protection of Species of Migratory Waterbirds and their Habitats ( <a href="#">EN</a> ) ( <a href="#">FR</a> )	

Conservation intervention	Guidance on methodology or approach	Good case studies
	<p>Ramsar Handbook 2. National wetland policies (<a href="#">EN</a>) (<a href="#">FR</a>) (<a href="#">ES</a>)</p> <p>Ramsar Handbook 3. Laws and institutions (<a href="#">EN</a>) (<a href="#">FR</a>) (<a href="#">ES</a>)</p> <p>AEWA Guidance on implementing harvest management through domestic legal regulations (EN)</p>	
<b>Reduce disturbance</b>	<p>AEWA Conservation Guidelines 11. Guidelines on how to avoid, minimize or mitigate impact of infrastructural developments and related disturbance affecting waterbirds (<a href="#">EN</a> only)</p> <p>Waterbirds &amp; Wetland Recreation Handbook (<a href="#">EN</a> only)</p>	See multiple studies summarised in <a href="#">Bird Conservation. Global evidence for the effects of interventions</a> (Chapter 9)
<b>D. Improve knowledge</b>		
<b>Undertake necessary research</b>	Sutherland 2000. The Conservation Handbook: Research, Management and Policy <sup>iii</sup>	
<b>Monitor species status and outcomes of interventions</b>	<p>AEWA Conservation Guidelines 9. Guidelines for a waterbird monitoring protocol (<a href="#">EN</a> only)</p> <p>Ramsar Handbook 13. Inventory, assessment and monitoring (<a href="#">EN</a>) (<a href="#">FR</a>) (<a href="#">ES</a>)</p> <p>Gregory et al. 2004. Bird census and survey techniques<sup>xxxii</sup></p>	
<b>E. Maintain networks</b>		
<b>Cooperate internationally</b>	Ramsar Handbook 20. International cooperation ( <a href="#">EN</a> ) ( <a href="#">FR</a> ) ( <a href="#">ES</a> )	The Endangered Wildlife Trust / International Crane Foundation Partnership's African Crane Conservation Programme <a href="http://www.ewt.org.za/accp/accp.html">http://www.ewt.org.za/accp/accp.html</a>

## FURTHER GENERAL SOURCES OF INFORMATION AND GUIDANCE

<https://www.conservationevidence.com/> (especially [https://www.conservationevidence.com/data/index/?synopsis\\_id\[\]=8](https://www.conservationevidence.com/data/index/?synopsis_id[]=8) for summaries of evidence for the effectiveness of various conservation interventions for birds.

IUCN-SSC Species Conservation Planning Sub-Committee 2017. *Guidelines for Species Conservation Planning*. Version 1.0. Gland, Switzerland: IUCN. xiv + 114 pp. ([EN](#)) ([FR](#))

Kirby, J., Giles, N., Davidson, N., Owen, M. & Spray, C. 2004. *Waterbirds & Wetland Recreation Handbook. A review of issues and management practice*. Wildfowl and Wetlands Trust, Slimbridge, UK. 128 pp. ([EN](#)) [Contains an extensive literature review and list of relevant publications]

Sutherland, W.J. (ed.) 2000. *The Conservation Handbook: Research, Management and Policy*. Blackwell, Oxford.

Sutherland, W.J. & Hill, D.A. 1995. *Managing habitats for conservation*. Cambridge University Press, UK. 399 pp. [Contains chapters on site management planning; access; coastal habitats; rivers, canals and dykes; waterbodies; reedbeds, fens and acid bogs; grasslands; farmland; lowland heathland; upland moors and heaths; woodland and scrub; and urban areas.]

Williams, D.R., Pople, R.G., Showler, D.A., Dicks, L.V., Child, M.F., zu Ermgassen, E.K.H.J. & Sutherland, W.J. 2013. *Bird Conservation. Global evidence for the effects of interventions*. Synopses of Conservation Evidence, Volume 2. Pelagic Publishing, Exeter, UK. 688 pp.  
<https://www.conservationevidence.com/synopsis/download/8>

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<sup>i</sup> IUCN – SSC Species Conservation Planning Sub-Committee 2017. *Guidelines for Species Conservation Planning*. Version 1.0. Gland, Switzerland: IUCN. xiv + 114 pp. ([EN](#)) ([FR](#))

<sup>ii</sup> UNEP/AEWA Secretariat 2015. Overview on the status of preparation and implementation of AEWA ISSAPs and ISSMPs as well as multi-species Action Plans 2015. AEWA/MOP 6.16 Rev.1. ([EN](#)) ([FR](#))

<sup>iii</sup> Sutherland, W.J. (ed.) 2000. *The Conservation Handbook: Research, Management and Policy*. Blackwell, Oxford.

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- <sup>iv</sup> Worboys, G.L., Lockwood, M., Kothari, A., Feary, S. & Pulsford, I. (eds.) 2015. *Protected Area Governance and Management*. ANU Press, Canberra, Australia.
- <sup>v</sup> Ausden, M. & Hirons, G.J.M. 2002. Grassland nature reserves for breeding wading birds in England and the implications for the ESA agri-environment scheme. *Biological Conservation* 106: 279–291.
- <sup>vi</sup> Ausden, M. 2004. Habitat management. Pp. 329–369. In: Sutherland, W.J., Newton, I. & Green, R.E. (eds.) *Bird Ecology and Conservation. A handbook of techniques*. Oxford University Press.
- <sup>vii</sup> Sutherland, W.J. & Hill, D.A. 1995. *Managing habitats for conservation*. Cambridge University Press, UK. 399 pp. [Contains chapters on site management planning; access; coastal habitats; rivers, canals and dykes; waterbodies; reedbeds, fens and acid bogs; grasslands; farmland; lowland heathland; upland moors and heaths; woodland and scrub; and urban areas.]
- <sup>viii</sup> Benstead, P., Drake, M., José, J., Mountford, O., Newbold, C. & Treweek, J. 1997. *The Wet Grassland Guide: managing floodplain and coastal wet grasslands for wildlife*. RSPB, Sandy, UK.
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