Reporting under the Habitat Regulations (as amended)[1]

2019-2024

Conservation status assessment for the species:

S2031 - Atlantic white-sided dolphin

(*Lagenorhynchus acutus*)

United Kingdom

JNCC

NATURAL ENGLAND

NatureScot
Scotland's Nature Agency
Buidheann Nàdair na h-Alba

Cyfoeth Naturiol Cymru
Natural Resources Wales

Department of Agriculture, Environment and Rural Affairs
An Roinn Talmhaíochta, Comhshaoil agus Gnóthaí Tuaithe
Depairtment o' Fairmin, Environment an' Kintra Matthers
www.daera-ni.gov.uk

Scottish Government
Riaghaltas na h-Alba
gov.scot

NIEA
Northern Ireland Environment Agency
Gníomhaireacht Comhshaoil Thuaisceart Éireann
Norlin Airlan Environment Agency

[1] **Habitat Regulations (as amended):**

- The Conservation of Habitats and Species Regulations 2017 (as amended), Regulation 9A
- The Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended), Regulation 6A
- Report under The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), regulation 3ZA
- The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended), regulation 3ZA

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The views and recommendations presented in this resource do not necessarily reflect the views and policies of JNCC.

Important note - Please read

- The information in this document represents the United Kingdom Reporting under the Habitat Regulations (as amended)[1], for the period 2019-2024.
- It is based on supporting information provided by Joint Nature Conservation Committee and UK Country Nature Consevation Bodies (CNCBs), which is documented separately.
- The Habitats Regulations reporting 2019-2024 Approach Document provides details on how this supporting information contributed to the UK Report and the fields that were completed for each parameter.
- Map showing the distribution and range of the species is included.
- Explanatory notes (where provided) are included at the end. These provide additional audit trail information to that included within the assessments. Further underpinning explanatory notes are available in the related country reports.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; (ii) completion of the field was not obligatory; and/or (iii) the field was not relevant to this species (section 12 National Site Network coverage for Annex II species).

Further details on the approach to the Habitats Regulations Reporting 2019-2024 are available on the JNCC website.

Assessment Summary: Atlantic white-sided dolphin

Distribution and Range Map

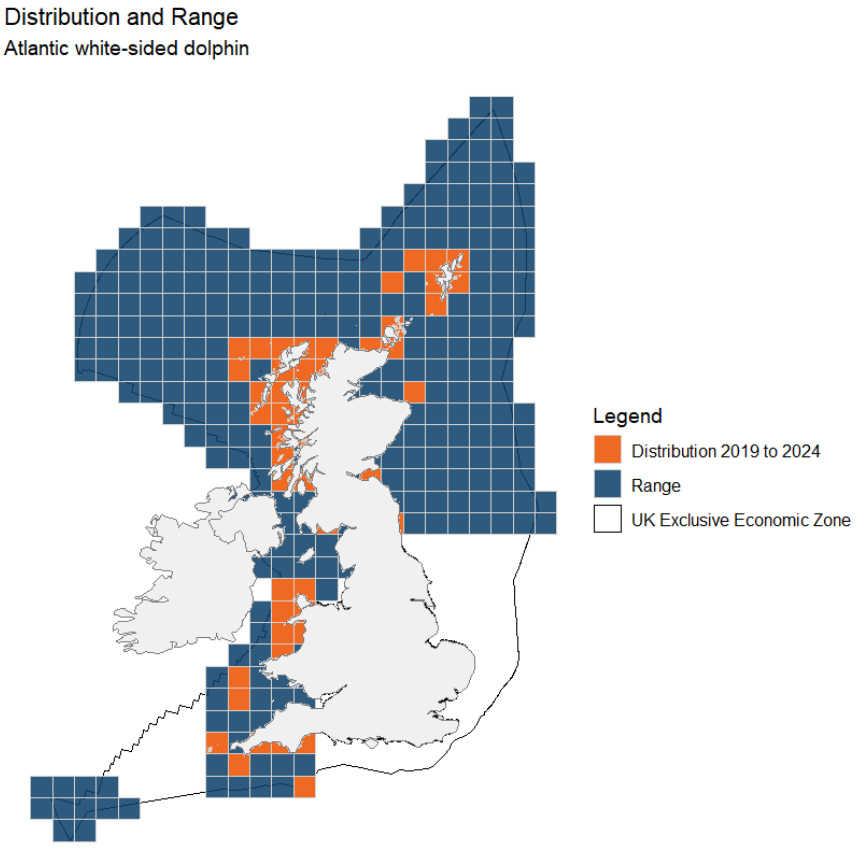

Figure 1: United Kingdom distribution and range map for S2031 - Atlantic white-sided dolphin (*Lagenorhynchus acutus*). The 50km grid square distribution map is based on available species records within the current reporting period.

Table 1: Table summarising the conservation status for S2031 - Atlantic white-sided dolphin (*Lagenorhynchus acutus*). Overall conservation status for species is based on assessments of range, population, habitat for the species, and future prospects.

Overall Conservation Status (see section 11)

Unknown (XX)

Breakdown of Overall Conservation Status

Range (see section 5)	**Favourable (FV)**
Population (see section 6)	**Unknown (XX)**
Habitat for the species (see section 7)	**Unknown (XX)**
Future prospects (see section 10)	**Unknown (XX)**

List of Sections

National Level 5
1. General information 5
2. Maps 5
3. Information related to Annex V Species 6

Biogeographical Level 7
4. Biogeographical and marine regions 7
5. Range 7
6. Population 9
7. Habitat for the species 12
8. Main pressures 13
9. Conservation measures 14
10. Future prospects 16
11. Conclusions 16
12. UK National Site Network (pSCIs, SCIs, SACs) coverage for Annex II species 18
13. Complementary information 19

14. References 20
Biogeographical and marine regions 20
Main pressures 24

15. Explanatory Notes 25

National Level

1. General information

1.1 Country	United Kingdom
1.2 Species code	S2031
1.3 Species scientific name	*Lagenorhynchus acutus*
1.4 Alternative species scientific name	
1.5 Common name	Atlantic white-sided dolphin
Annex(es)	IV

2. Maps

2.1 Sensitive species	No
2.2 Year or period	2019-2024
2.3 Distribution map	Yes
2.4 Distribution map; Method used	Complete survey or a statistically robust estimate

2.5 Additional information

Genetic analysis of Atlantic white-sided dolphin in the North Atlantic show a pattern of strong connectivity with no genetic diversity across the species range, indicating the region is occupied by a single population (Gose, et al 2023).

The distribution map is based on verified sightings data of Atlantic white-sided dolphin between 2019 and 2024. The sightings were collated from SCANS IV, Pelagis French surveys, NBN Atlas, European Seabirds at Sea, the Joint Cetacean Data Programme, POSEIDON project, University of Aberdeen, The Crown Estate Marine Data Exchange, Whale and Dolphin Conservation, Hebridean Whale and Dolphin Trust, ORCA, Sea Watch Foundation, Marine Discovery Penzance, Sussex Dolphin Project, Cornwall Seal Group Research Trust, Cardigan Bay Marine Wildlife Centre, Natural England, Sea Trust and The Royal Society for the Protection of Birds (RSPB).

3. Information related to Annex V Species

3.1 Is the species taken in the wild / exploited?

3.2 What measures have been taken?

a) Regulations regarding access to property

b) Temporary or local prohibition on the taking of specimens in the wild and exploitation

c) Regulation of the periods and/or methods of taking specimens

d) Application of hunting and fishing rules which take account of the conservation of such populations

e) Establishment of a system of licences for taking specimens or of quotas

f) Regulation of the purchase, sale, offering for sale, keeping for sale, or transport for sale of specimens

g) Breeding in captivity of animal species as well as artificial propagation of plant species

Other measures

Other measures description

3.3: Hunting bag or quantity taken in the wild for Mammals and Acipenseridae (Fish)

a) Unit

Table 2: Quantity taken from the wild during the reporting period (see 3.3a for units). For species with defined hunting seasons, Season 1 refers to 2018/2019 (autumn 2018 to spring 2019), and Season 6 to 2023/2024. For species without hunting seasons, data are reported by calendar year: Year 1 is 2019, and Year 6 is 2024.

	Season/ year 1	Season/ year 2	Season/ year 3	Season/ year 4	Season/ year 5	Season/ year 6
b) Minimum	-	-	-	-	-	-

c) Maximum	-	-	-	-	-	-
d) Unknown	-	-	-	-	-	-

3.4: Hunting bag or quantity taken in the wild; Method used

3.5: Additional information

No additional information

Biogeographical Level

4. Biogeographical and marine regions

4.1 Biogeographical or marine region where the species occurs MATL

4.2 Sources of information

See section 14 References

5. Range

5.1 Surface area (km²)	726,488
5.2 Short-term trend; Period	2013-2024
5.3 Short-term trend; Direction	Stable
5.4 Short-term trend; Magnitude	
a) Estimated minimum	
b) Estimated maximum	
c) Pre-defined range	
d) Unknown	
e) Type of estimate	

f) Rate of decrease	
5.5 Short-term trend; Method used	Based mainly on expert opinion with very limited data
5.6 Long-term trend; Period	1994-2024
5.7 Long-term trend; Direction	Stable
5.8 Long-term trend; Magnitude	
a) Minimum	
b) Maximum	
c) Rate of decrease	
5.9 Long-term trend; Method used	Based mainly on expert opinion with very limited data

5.10 Favourable Reference Range (FRR)

a) Area (km²)	641,387
b) Pre-defined increment	
c) Unknown	No
d) Method used	Model-based approach
e) Quality of information	moderate

5.11 Change and reason for change in surface area of range

a) Change	Yes
b) Genuine change	No
c) Improved knowledge or more accurate data	Yes
d) Different method	No
e) No information	No
f) Other reason	No
g) Main reason	Improved knowledge/more accurate data

5.12 Additional information

The distribution is based on verified sightings of Atlantic white-sided dolphin between 2019 and 2024. The sightings were collated from SCANS IV, Pelagis French surveys, NBN Atlas, European Seabirds at Sea, the Joint Cetacean Data Programme, POSEIDON project, University of Aberdeen, The Crown Estate Marine Data Exchange, Whale and Dolphin Conservation, Hebridean Whale and Dolphin Trust, ORCA, Sea Watch Foundation, Marine Discovery Penzance, Sussex Dolphin Project, Cornwall Seal Group Research Trust, Cardigan Bay Marine Wildlife Centre, Natural England, Sea Trust and The Royal Society for the Protection of Birds (RSPB).

The FRR range was based on an analysis of effort-related survey data spanning 1994-2010 compiled for the Joint Cetacean Protocol (JCP) undertaken by Paxton et al. (2016). The predicted range was based on the modelled prediction of Atlantic white-sided dolphin distribution and adapted based on additional sightings data and expert knowledge.

Atlantic white-sided dolphins are found primarily in the north of the UK and are most commonly sighted along the continental shelf and the deep waters to the north and west of Scotland (Gilles et al., 2023). Due to low survey effort, their presence in these offshore areas is not well represented by the map, though it does illustrate their northerly distribution. It is likely that the species can be found anywhere within their range.

Based on recent modelling of cetacean species (such as Waggit et al., 2019) and the distribution of observations from citizen science and systematic surveys, some areas of low occurrence were not represented in the modelled range in the 2013 published Habitats Directive Article 17 assessments. Therefore, the range has been updated to include areas where Atlantic white-sided dolphin have been recorded but were not covered by the 2013 modelled range. This change reflects improvement in our knowledge of this species, rather than a genuine change.

Since the 2019 Habitats Directive Article 17 assessments, the FRR has changed due to the removal of the EEZ extension into offshore waters west of Scotland. This area has been removed due to lack of data for all species, and subsequent impact on confidence in assessments. This does not represent genuine change in FRR.

6. Population

6.1 Year or period	2022

6.2 Population size (in reporting unit)

a) Unit	number of individuals
b) Minimum	4,944

c) Maximum	31,054
d) Best single value	12,393
6.3 Type of estimate	95% confidence interval
6.4 Quality of extrapolation to reporting unit	low

6.5 Additional population size (using population unit other than reporting unit)

a) Unit	
b) Minimum	
c) Maximum	
d) Best single value	
e) Type of estimate	
6.6 Population size; Method used	Complete survey or a statistically robust estimate
6.7 Short-term trend; Period	
6.8 Short-term trend; Direction	Unknown
6.9 Short-term trend; Magnitude	
a) Estimated minimum	
b) Estimated maximum	
c) Pre-defined range	
d) Unknown	
e) Type of estimate	
f) Rate of decrease	
6.10 Short-term trend; Method used	Insufficient or no data available
6.11 Long-term trend; Period	
6.12 Long-term trend; Direction	Unknown

6.13 Long-term trend; Magnitude	
a) Minimum	
b) Maximum	
c) Confidence interval	
d) Rate of decrease	
6.14 Long-term trend; Method used	Insufficient or no data available

6.15 Favourable Reference Population (FRP)

ai) Population size	25,893
aii) Unit	number of individuals
b) Pre-defined increment	
c) Unknown	No
d) Method used	Model-based approach
e) Quality of information	moderate

6.16 Change and reason for change in population size

a) Change	Yes
b) Genuine change	No
c) Improved knowledge or more accurate data	No
d) Different method	No
e) No information	No
f) Other reason	Yes
g) Main reason	Other reasons

6.17 Additional information

The population estimate for 2022 is based primarily on density estimates from the SCANS IV survey. However, there is a gap in the 2022 SCANS survey effort in offshore waters west of Scotland, a high-density region for this species which accounted for 80%

of the UK population during SCANS III (Gilles et al., 2013; Hammond et al., 2021). The population estimate provided here has therefore been corrected using the % of the UK population sighted in the missing block during SCANS III. Such significant extrapolation lowers confidence in the estimate and conclusions.

With only two population estimates covering the UK portion of the Atlantic white-sided dolphin range, it is not possible to assess a trend in the population. Wider context on the population distribution and abundance will be provided from recent surveys by NAMMCO which are yet to be published.

The FRV for population (25893; CV: 0.466; CI: 10856-61758) was calculated based on estimates from SCANS III in 2016, suplemented wtih density estimates from neighboring regions to fill data gaps within the UK EEZ and limit extrapolation where possible: ObSERVE in Irish waters (Rogan, e al., 2018), NASS 2015 (Pike, et al., 2019a) and NILS 2015 (Leonard and Øien, 2020a) surveys in the NAMMCO region.

Since the 2019 Habitats Directive Article 17 assessments, the FRV has changed due to the removal of the EEZ extension into offshore waters west of Scotland. This area has been removed due to lack of data for all species, and subsequent impact on confidence in assessments. This does not represent genuine change in FRV.

6.18 Age structure, mortality and reproduction deviation	Unknown

7. Habitat for the species

7.1 Sufficiency of area and quality of occupied habitat (for long-term survival)

a) Is area of occupied habitat sufficient?	Unknown
b) Is quality of occupied habitat sufficient?	Unknown
c) If No or Unknown, is there a sufficiently large area of unoccupied habitat of suitable quality?	Unknown

7.2 Sufficiency of area and quality of occupied habitat; Method used

a) Sufficiency of area of occupied habitat; Method used	Based mainly on expert opinion with very limited data

b) Sufficiency of quality of occupied habitat; Method used	Based mainly on expert opinion with very limited data
7.3 Short-term trend; Period	
7.4 Short-term trend; Direction	Unknown
7.5 Short-term trend; Method used	Based mainly on expert opinion with very limited data
7.6 Long-term trend; Period	
7.7 Long-term trend; Direction	Unknown
7.8 Long-term trend; Method used	Based mainly on expert opinion with very limited data

7.9 Additional information

Atlantic white-sides dolphin mainly occur in the north of the UK EEZ and west of Scotland with occasional occurance in the North Sea (Hammond, et al., 2021; Gilles et al., 2023). This species shows a preference for continential shelf waters with steep slope habitat types (Wall et al., 2013; Cipriano, 2018)

Direct evidence of cetacean habitat quality is limited as presently, a comprehensive understanding of the key elements important to the species is undetermined. In some cases, conclusions for species range and population could be indicative of habitat quality by proxy, however confidence in assessment outputs would be low.

Evidence suggests that climate change may reduce habitat suitabilty for this species as sea tempteatures rise, leading to a northward shift in the population range (Lambert e al, 2014; Williamson et al, 2021).

8. Main pressures

8.1 Characterisation of pressures

Table 3: Pressures affecting the species, including timing and importance/impact ranking. Pressures are defined as factors acting currently and/or during the reporting period (2019–2024). Rankings are: High (direct/immediate influence and/or large spatial extent) and Medium (moderate direct/immediate influence, mainly indirect and/or regional extent).

Pressure	Timing	Ranking
Geotechnical surveying	Ongoing and likely to be in the future	Medium (M)

Residential, commercial and industrial activities and structures generating noise, light, heat or other forms of pollution	Ongoing and likely to be in the future	Medium (M)
Marine fish and shellfish harvesting causing reduction of species/prey populations and disturbance of species (professional)	Ongoing and likely to be in the future	Medium (M)
Bycatch and incidental killing (due to fishing and hunting activities)	Ongoing and likely to be in the future	Medium (M)
Mixed source marine water pollution (marine and coastal)	Ongoing and likely to be in the future	Medium (M)
Change of species distribution (natural newcomers) due to climate change	Ongoing and likely to be in the future	Medium (M)
Threats and pressures from outside the Member State	Ongoing and likely to be in the future	Medium (M)

8.2 Sources of information

See section 14 References

8.3 Additional information

PC07: Regional pressure in the North Sea and the Irish Sea.

PJ13: Pressure PJ13 is the closest appropriate pressure but is being used to consider all changes in species distribution, including range contractions (i.e., not only natural newcomers).

PX02: Relating to continued whaling of this species outside of UK waters which may be having an impact on populations.

9. Conservation measures

9.1: Status of measures

a) Are measures needed?	Yes
b) Indicate the status of measures	Measures identified and taken
9.2 Main purpose of the measures taken	Maintain the current range, population and/or habitat for the species

9.3 Location of the measures taken	Both inside and outside National Site Network
9.4 Response to measures	Medium-term results (within the next two reporting periods, 2025–2036)

9.5 List of main conservation measures

Table 4: Key conservation measures addressing current pressures and/or anticipated threats during the next two reporting periods (2025–2036). Measures are ranked by importance/impact: High (direct/immediate influence and/or large spatial extent) and Medium (moderate direct/immediate influence, mainly indirect and/or regional extent).

Conservation measure	Ranking
Adapt/manage exploitation of energy resources	High (H)
Adapt/manage renewable energy installation, facilities and operation (excl. hydropower and abstraction activities)	High (H)
Management of professional/commercial fishing, shellfish and seaweed harvesting (incl. restoration of habitats)	High (H)
Reduce bycatch and incidental killing of non-target species	High (H)
Reduce impact of mixed source pollution	High (H)
Control/eradication of illegal killing, fishing and harvesting of wild plants, fungi and anmals	High (H)

9.6 Additional information

This species is not an Annex II species and therefore the designation of SACs is not required, as stipulated in the Habitats Regulations. However, as a European Protected Species, protection is provided throughout UK waters and it is an offence to kill, injure or disturb. The UK remains committed to the conservation of marine mammals in UK waters and the implementation of measures to mitigate the impact of pressures and conservation measures have been undertaken in the UK and adjacent waters as part of the requirements of the Habitats Regulations. Such measures include monitoring bycatch, monitoring strandings data to monitor current and identify emerging pressures, application of appropriate management measures, and noise monitoring and mitigation with regards to offshore industry. This is reflected in the list of conservation measures under field 9.5. The UK also supports a range of international agreements and conventions on the conservation of marine mammals and the marine environment. For example: The Convention on Migratory Species; the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR). A UK Cetacean Conservation

Strategy is currently in development, due for publication shortly. The strategy is intended to support decision making and identify actions necessary to maintain or improve the conservation status of cetaceans in UK waters. Defra and devolved administrations fund national strandings schemes for cetaceans which aim to: collate, analyse and report data for all cetacean strandings around the coast of the UK; determine the causes of death (both natural and anthropogenic) in stranded cetaceans, including bycatch and physical trauma and; undertake surveillance on the incidence of disease in stranded cetaceans in order to identify any substantial new threats to their conservation status.

10. Future prospects

10.1a Future trends of parameters

ai) Range	Overall stable
bi) Population	Unknown
ci) Habitat for the species	Unknown

10.1b Future prospects of parameters

aii) Range	Unknown
bii) Population	Unknown
cii) Habitat for the species	Unknown

10.2 Additional information

No additional information

11. Conclusions

11.1 Range	Favourable (FV)
11.2 Population	Unknown (XX)
11.3 Habitat for the species	Unknown (XX)
11.4 Future prospects	Unknown (XX)
11.5 Overall assessment of Conservation Status	Unknown (XX)

11.6 Overall trend in Conservation Status	Unknown

11.7 Change and reason for change in conservation status

a) Change	No
b) Genuine change	
c) Improved knowledge or more accurate data	
d) Different method	
e) No information	
f) Other reason	
g) Main reason	

11.7 Change and reason for change in conservation status trend

a) Change	No
b) Genuine change	
c) Improved knowledge or more accurate data	
d) Different method	
e) No information	
f) Other reason	
g) Main reason	

11.8 Additional information

Conclusions on Range reached because: (i) the short-term trend direction in Range surface is stable and (ii) the current Range surface area is greater than the Favourable Reference Range.

Conclusions on Population reached because: (i) the population estimate for 2022 is based primarily on density estimates from the SCANS IV survey. Offshore waters west of Scotland is considered to be a high-density region for this species, accounting for 85% of the total population estimate in 2015 (Gilles, et al., 2013; Hammond et al 2021), and 80% of the UK proportion. As this offshore region west of Scotland was unable to be

surveyed as part of the 2022 SCANS IV effort, it has not been possible to calculate the total population abundance estimate for this species across the entire UK EEZ using SCANS IV survey data. The estimated population size in this report is likely to be a significant understimation; and (ii) the short-term trend direction in Population size is unknown as it is not possible to assess trends in population using UK-based data only.

Conclusion on Habitat for the species reached because: (i) it is unknown whether the area of habitat is sufficiently large; (ii) it is unknown if habitat quality is sufficient for the long-term survival of the species; and (iii) the short-term trend in area and quality of habitat is unknown.

Future prospects: (i) the Future prospects for Range are good; but (ii) the Future prospects for Population are unknown; and (iii) the Future prospects for Habitat for the species are unknown.

Overall assessment of Conservation Status is Unfavourable-bad (U2) as one or more of the above conclusions are Unfavourable-bad.

Evidence suggests trends in distribution are becoming apparent for this species likley driven by climate change, which is contributing to some uncertainty in conclusions for future prospects for this species.

Overall trend in Conservation Status is based on the combination of the short term trends for Range - stable, Population - unknown, and Habitat for the species - unknown.

12. UK National Site Network (pSCIs, SCIs, SACs) coverage for Annex II species

12.1 Population size inside the pSCIs, SCIs and SACs network

a) Unit	
b) Minimum	
c) Maximum	
d) Best single value	

12.2 Type of estimate	
12.3 Population size inside the network; Method used	
12.4 Short-term trend of population size within the network; Direction	

12.5 Short-term trend of population size within the network; Method used	
12.6 Short-term trend of habitat for the species inside the pSCIs, SCIs and SACs network; Direction	
12.7 Short-term trend of habitat for the species inside the pSCIs, SCIs and SACs network; Method used	

12.8 Additional information

No additional information

13. Complementary information

13.1 Justification of percentage thresholds for trends

No justification information

13.2 Trans-boundary assessment

No trans-boundary assessment information

13.2 Other relevant information

No other relevant information

14. References

Biogeographical and marine regions

4.2 Sources of information

Gose, M.-A., Humble, E., Brownlow, A., Wall, D., Rogan, E., Sigurðsson, G.M., Kiszka, J.J., Thøstesen, C.B., IJsseldijk, L.L., ten Doeschate, M., Davison, N.J., Øien, N., Deaville, R., Siebert, U., Ogden, R., 2024. Population genomics of the white-beaked dolphin (Lagenorhynchus albirostris): Implications for conservation amid climate-driven range shifts. Heredity 1–10. https://doi.org/10.1038/s41437-024-00672-7

Hammond, PS, Lacey, C, Gilles, A, Viquerat, S, Börjesson, P, Herr, H, Macleod, K, Ridoux, V, Santos, MB, Scheidat, M, Teilmann, J, Vingada, J & Øien, N (2021). Estimates of cetacean abundance in European Atlantic waters in summer 2016 from the SCANS-III aerial and shipboard surveys. SCANS-III project report 1, 39 pp. https://scans3.wp.st-andrews.ac.uk/files/2021/06/SCANS-III_design-based_estimates_final_report_revised_June_2021.pdf

Williamson, M.J., ten Doeschate, M.T.I., Deaville, R., Brownlow, A.C., Taylor, N.L., 2021. Cetaceans as sentinels for informing climate change policy in UK waters. Marine Policy 131, 104634. https://doi.org/10.1016/j.marpol.2021.104634

Lambert E, Pierce GJ, Hall K, Brereton T, Dunn TE, Wall D et al. (2014) Cetacean range and climate in the eastern North Atlantic: future predictions and implications for conservation. Glob Change Biol 20:1782–1793. https://doi.org/10.1111/gcb.12560

Gilles, A, Authier, M, Ramirez-Martinez, NC, Araújo, H, Blanchard, A, Carlström, J, Eira, C, Dorémus, G, Fernández-Maldonado, C, Geelhoed, SCV, Kyhn, L, Laran, S, Nachtsheim, D, Panigada, S, Pigeault, R, Sequeira, M, Sveegaard, S,Taylor, NL, Owen, K, Saavedra, C, Vázquez-Bonales, JA, Unger, B, Hammond, PS (2023). Estimates of cetaceanabundance in European Atlantic waters in summer 2022 from the SCANS-IV aerial and shipboard surveys. Final report published 29 September 2023. 64 pp. https://www.tiho-hannover.de/itaw/scans-iv-survey

Wall, Dave & Murray, Clare & O'Brien, Joanne & Kavanagh, Laura & Wilson, Chris & Glanville, Brian & Williams, David & Enlander, Ian & O'Connor, Ian & Mcgrath, Dave & Whooley, Pádraig & Berrow, Simon & Ryan, Conor & O'brien, Murray & O'Connor, Ian. (2013). Atlas of the Distribution and Relative Abundance of Marine Mammals in Irish Offshore Waters: Atlas of the Distribution and Relative Abundance of Marine Mammals in Irish Offshore Waters: 2005 −2011.

Cipriano, F. (2018). Atlantic White-Sided Dolphin: Lagenorhynchus acutus. In Encyclopedia of marine mammals (pp. 42-44). Academic Press. https://doi.org/10.1016/B978-0-12-804327-1.00051-0

Paxton, C.G.M., Scott-Hayward, L., Mackenzie, M., Rexstad, E. & Thomas, L. (2016) Revised Phase III Data Analysis of Joint Cetacean Protocol Data Resource, JNCC Report No. 517, JNCC, Peterborough, ISSN 0963-8091. https://hub.jncc.gov.uk/assets/01adfabd-e75f-48ba-9643-2d594983201e

Rogan, E., Breen, P., Mackey, M., Cañadas, A., Scheidat, M., Geelhoed, S. & Jessopp, M. (2018). Aerial surveys of cetaceans and seabirds in Irish waters: Occurrence, distribution and abundance in 2015-2017. Department of Communications, Climate Action & Environment and National Parks and Wildlife Service (NPWS), Department of Culture, Heritage and the Gaeltacht, Dublin, Ireland. 297pp. https://www.gov.ie/en/publication/12374-observe-programme

Deaville, R. (compiler). 2011:2024. Annual Reports for the period 1st January to 31st December. UK Cetacean Strandings Investigation Programme (CSIP).

Faroese Government - Whales and Whaling in the Faroes. Available at: http://www.whaling.fo/en/regulated/450-years-of-statistics/catches [Accessed 06 Nov 2024]

Hermannsen, L., Beedholm, K., Tougaard, J. and Madsen, P.T. 2014. High frequency components of ship noise in shallow water with a discussion of implications for harbor porpoises (Phocoena phocoena). The Journal of the Acoustical Society of America, 136(4), pp.1640-1653.

JNCC. 2010a. The protection of marine European Protected Species from deliberate injury, killing and disturbance. Guidance for the marine area in England and Wales and the UK offshore marine area. Available on request from JNCC.

JNCC. 2010b. Statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from Piling noise. 2010. JNCC Peterborough. United Kingdom. Available at: https://data.jncc.gov.uk/data/31662b6a-19ed-4918-9fab-8fbcff752046/JNCC-CNCB-Piling-protocol-August2010-Web.pdf [Accessed 06 Nov 2024]

JNCC. 2010c. JNCC guidelines for minimising the risk of injury to marine mammals from using explosives. August 2010. Available at: https://data.jncc.gov.uk/data/24cc180d-4030-49dd-8977-a04ebe0d7aca/JNCC-Guidelines-Explosives-Guidelines-201008-Web.pdf [Accessed 06 Nov 2024]

JNCC. 2023. JNCC guidance for the use of Passive Acoustic Monitoring in UK waters for minimising the risk of injury to marine mammals from offshore activities. JNCC, Peterborough. Available at: https://hub.jncc.gov.uk/assets/fb7d345b-ec24-4c60-aba2-894e50375e33 [Accessed 06 Nov 2024]

Kavanagh, A.S., Nykänen, M., Hunt, W., Richardson, N. and Jessopp, M.J. 2019. Seismic surveys reduce cetacean sightings across a large marine ecosystem. Scientific reports, 9(1), p.19164.

Lambert, E., Pierce, G.J., Hall, K., Brereton, T., Dunn, T.E., Wall, D., Jepson, P.D., Deaville, R. and MacLeod, C.D., 2014. Cetacean range and climate in the eastern North Atlantic: future predictions and implications for conservation. Global Change Biology, 20(6), pp.1782-1793.

MacLeod, C.D., 2009. Global climate change, range changes and potential implications for the conservation of marine cetaceans: a review and synthesis. Endangered Species Research, 7(2), pp.125-136.

Marine Scotland. 2014. The protection of Marine European Protected Species from injury and disturbance. Guidance for Scottish Inshore Waters.

Megson, D., Brown, T., Jones, G.R., Robson, M., Johnson, G.W., Tiktak, G.P., Sandau, C.D. and Reiner, E.J. 2022. Polychlorinated biphenyl (PCB) concentrations and profiles in marine mammals from the North Atlantic Ocean. Chemosphere, 288, p.132639.

Middel, H. and Verones, F. 2017. Making marine noise pollution impacts heard: the case of cetaceans in the North sea within life cycle impact assessment. Sustainability, 9(7), p.1138.

Morizur, Y., Berrow, S.D., Tregenza, N.J.C., Couperus, A.S. and Pouvreau, S. 1999. Incidental catches of marine-mammals in pelagic trawl fisheries of the northeast Atlantic. Fisheries Research, 41(3), pp.297-307.

Northridge, S.P., Kingston, A.R. and Thomas, L.J. 2016. Annual Report on the Implementation of Council Regulation (EC) No 812/2004 during 2015.

Plint, T., ten Doeschate, M.T., Brownlow, A.C., Davison, N.J., Hantke, G., Kitchener, A.C., Longstaffe, F.J., McGill, R.A., Simon-Nutbrown, C. and Magill, C.R. 2023. Stable isotope ecology and interspecific dietary overlap among dolphins in the Northeast Atlantic. Frontiers in Marine Science, 10, p.1111295.

Reeves, R.R., Smeenk, C., Brownell Jr, R.L. and Kinze, C.C. 1999. Atlantic white-sided dolphin Lagenorhynchus acutus (Gray, 1828). Handbook of marine mammals, 6, pp.31-56.

Robinson, S.P., Wang, L., Cheong, S.H., Lepper, P.A., Hartley, J.P., Thompson, P.M., Edwards, E. and Bellmann, M. 2022. Acoustic characterisation of unexploded ordnance disposal in the North Sea using high order detonations. Marine Pollution Bulletin, 184, p.114178.

Ross, A. 2003. Cetacean bycatch in pelagic trawl fisheries in the Celtic Sea, Biscay, Channel area - a case for emergency action (AC10/Doc.19 O). Bonn, Germany, (unpublished); 10.

Rotander, A., van Bavel, B., Polder, A., Rigét, F., Auðunsson, G.A., Gabrielsen, G.W., Víkingsson, G., Bloch, D. and Dam, M. 2012. Polybrominated diphenyl ethers (PBDEs) in marine mammals from Arctic and North Atlantic regions, 1986–2009. Environment international, 40, pp.102-109.

Scottish Marine Animal Stranding Scheme. 2022:2023. Scottish Marine Animal Stranding Scheme (SMASS) Annual Reports. Available at: https://strandings.org/publications/ [Accessed 06 Nov 2024]

Simmonds, M., McLellan, F., Entrup, N., & Nunny, L. (2021). Whaling in Europe: An Ongoing Welfare and Conservation Concern In: Under Pressure: The need to protect whales and dolphins in European waters. An OceanCare Report. Available at: https://www.oceancare.org/wp-content/uploads/2022/11/Animal_Species_Protection_Under-Pressure_Whales-and-Dolphins_EU_Report_OceanCare_EN_146p_2021.pdf [Accessed 06 Nov 2024]

Stone, C., Hall, K., Mendes, S. and Tasker, M. 2017. The effects of seismic operations in UK waters: analysis of Marine Mammal Observer data. J. Cetacean Res. Manage., 16, pp.71-85.

Stone, C.J. 2003. The effects of seismic activity on marine mammals in UK waters, 1998-2000. JNCC Report No. 323. Available at: https://data.jncc.gov.uk/data/bf3ea885-e5c5-4088-956b-4f5ff9ca0b56/JNCC-Report-323-FINAL-WEB.pdf [Accessed 06 Nov 2024]

Stone, C.J. 2015. Implementation of and considerations for revisions to the JNCC guidelines for seismic surveys. JNCC Report No. 463b. Avaialble at: https://data.jncc.gov.uk/data/f7990481-7a99-414c-be04-b972da10c1b7/JNCC-Report-463b-FINAL-WEB.pdf [Accessed 06 Nov 2024]

Stone, C.J. and Tasker, M.L. 2006. The effects of seismic airguns on cetaceans in UK waters. J. Cetacean Res. Manage., 8(3), pp.255-263.

Tuerk, K.J., Kucklick, J.R., McFee, W.E., Pugh, R.S. and Becker, P.R. 2005. Factors influencing persistent organic pollutant concentrations in the Atlantic white-sided dolphin (Lagenorhynchus acutus). Environmental Toxicology and Chemistry: An International Journal, 24(5), pp.1079-1087.

Williams, R.S., Brownlow, A., Baillie, A., Barber, J.L., Barnett, J., Davison, N.J., Deaville, R., Ten Doeschate, M., Murphy, S., Penrose, R. and Perkins, M. 2023. Spatiotemporal

trends spanning three decades show toxic levels of chemical contaminants in marine mammals. Environmental Science & Technology, 57(49), pp.20736-20749.

JNCC. 2025. JNCC guidelines for minimising the risk of injury to marine mammals from unexploded ordnance (UXO) clearance in the marine environment. JNCC, Aberdeen.

JNCC, Natural England and Cefas. 2025. JNCC, Natural England and Cefas position on the use of quieter piling methods and noise abatement systems when installing offshore wind turbine foundations. JNCC, Aberdeen.

Evans, P.G.H. and Waggitt, J.J. 2023. Modelled Distribution and Abundance of Cetaceans and Seabirds in Wales and Surrounding Waters. NRW Evidence Report, Report No: 646,

354 pp. Natural Resources Wales, Bangor.

Main pressures

8.2 Sources of information

No sources of information

15. Explanatory Notes

Field label	Note
8.1: Characterisation of pressures	PX02 Threats and pressures from outside the Member State. Atlantic white-sided dolphin has been historically hunted in neighbouring waters, and the species is taken annually in hunts in NE Atlantic countries out with the EU. This species is still taken as part of the pilot whale hunt and opportunistically in the Faroe Islands, with over 400 animals recorded in some years over the past decade (http://www.whaling.fo/en/regulated/450-years-of-statistics/catches; Simmonds et al., 2021).
8.1: Characterisation of pressures	PC07 Geotechnical surveying. JNCC advice on geotechnical surveying covers all marine mammals in UK waters and Atlantic white-sided dolphins were the most numerous species recorded during visual and/or acoustic observation between 1994 and 2010 in UK waters (Stone, 2015; Kavanagh et al., 2019), indicating relatively high exposure to this pressure. Geotechnical surveys will are likely to have an immediate influence on this species, with strong avoidance responses noted by studies (Stone, 2015; Stone et al. 2017, Stone, 2003; Stone & Tasker, 2006). There is also the potential for temporary or permanent threshold shifts in response to some activities (Robinson et al., 2022). Close proximity to noise created by geotechnical activity also has potential to cause injury, although evidence for the impact and level of risk is limited. This is also mitigated through guidance on operations such as soft start and on board marine mammal observers. Pressures are likely to be higher in the North Sea and Celtic and Irish Seas.
8.1: Characterisation of pressures	PG13 Bycatch and incidental killing (due to fishing and hunting activities). Atlantic white-sided dolphins are susceptible to capture in midwater trawl nets (Ross, 2003) and substantial numbers have been bycaught in pelagic trawl fisheries for horse mackerel and mackerel south-west of Ireland (Reeves et al., 1999) and in the English Channel (Morizur et al., 1999). The UK Bycatch Monitoring

	Programme have also evidence of bycatch of Atlantic white-sided dolphin in set net fisheries (Northridge et al., 2016). However, the offshore distribution reduces the chance of this issue being observed given limited bycatch observer effort and the reduced chance of dead animals stranding.
8.1: Characterisation of pressures	PG01 Marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species. Starvation is identified as an important cause of death for Atlantic white-sided dolphin in UK waters through the UK Cetacean Stranding Investigations Programme (CSIP) and the Scottish Marine Animal Stranding Scheme (SMASS) (Deaville, 2011:2024, Scottish Marine Animal Stranding Scheme, 2022; 2023). However, prey depletion can result from both natural and anthropogenic causes. No link has been identified between commercial fishing practices and the cases of cetacean starvation recorded through the UK CSIP.
8.1: Characterisation of pressures	PF12 Industrial or commercial activities and structures generating noise, light, heat or other forms of pollution. Used to identify risk of the cumulative effects of noise on cetaceans. Cetaceans rely on echolocation for navigation, foraging and communication, making them sensitive to noise (Middel and Verones, 2017). Although various individual sources of disturbance have been identified as potential pressures in the pre-defined EU list, these pressures independently have not been identified as Medium or High risk to Atlantic white-sided dolphins in UK waters, with the exception of geotechnical surveying. For example, disturbance reactions have been observed in response to shipping (Hermannsen et al., 2014), but evidence does not suggest this alone is a significant risk for the species. The cumulative impact of these and other sources of noise disturbance may, however, be greater when combined.
8.1: Characterisation of pressures	PK02 Mixed source marine water pollution (marine and coastal). Generally, contaminant concentrations in Atlantic white-sided dolphins were lower than other marine mammal

	species found in UK waters (Megson et al. 2022; Williams et al., 2023), likely due to their largely offshore distribution. However, evidence continues to suggest that Atlantic white-sided dolphins are more susceptible to certain contaminants (e.g., PBDE's, some PCB's) than other cetacean species (Rotander et al., 2012; Megson et al. 2022; Williams et al., 2023; Tuerk et al., 2009).
8.1: Characterisation of pressures	PJ13 Change of species distribution (natural newcomers) due to climate change. Using PJ13 in the context of species distribution (not focussing solely on natural newcomers). A review of stranding records around the UK indicated a northward shift in cold water species, including Atlantic white-sided dolphin linked to rising sea surface temperatures (Williamson et al., 2021). This is supports previous literature which suggesting that Atlantic white-sided dolphin may be particularly vulnerable to climate change impacts regarding changes in water temperature (MacLeod, 2009; Lambert et al., 2014). For Atlantic white-sided dolphin this may ultimately lead to a range contraction (Lambert et al., 2014) and increased competition for prey as other cetacean species also shift distributions due to climate change (e.g., short-beaked common dolphin; Williamson et al., 2021; Plint et al., 2023).
9.5: List of main conservation measures	MG05 Reduce bycatch and incidental killing of non-target species: The UK is implementing the EU Technical Conservation Measures Regulation transposed into UK regulations which lays down measures concerning incidental catches of vulnerable species in fisheries, and more generally the bycatch obligations within the Habitats Regulations. Since 2004, a dedicated bycatch monitoring programme has been in place, with both dedicated and non-dedicated onboard observers collecting data on bycatch numbers. These data inform implementation and potential effectiveness of measures such as pingers. There is a requirement for all fishing vessels over 12m using gill nets or entanglement nets to use pingers under the criteria laid out in the regulation. Inshore Vessel Monitoring System (iVMS) devices are being implemented for under-12 metre

	fishing vessels, allowing data on latitude, longitude, course and speed to be recorded and help improve the management and sustainability of the marine environment. Legislation to make iVMS mandatory on under-12 metre vessels is expected to come into effect in 2024 in England. In Scotland, consultation on the introduction mandatory electronic tracking for under-12 metre vessels was carried out in late 2023. Legislation requiring iVMS for under-12 metre vessels operating in Welsh waters has been in place since 2022. Since February 2022 it has been mandatory for under-10 metre fishing vessels in English and Welsh waters to create and submit a catch record for every fishing trip through the Catch Recording Application (Catch App or Record your Catch). Data is collected on vessel, trip, gear, area fished and catch and can be used to inform on fishing activity by gear type and species. Furthermore, the UK Marine Wildlife Bycatch Mitigation Initiative (published August 2022) aims to improve our understanding of bycatch and entanglement of sensitive marine species through monitoring and scientific research, identify 'hotspot" or high-risk areas/gear types/fisheries in which to focus monitoring and mitigation, and develop and implement effective measures to minimise bycatch/entanglement. Currently work is progressing towards development of a bycatch risk framework across all PET species to apply all available evidence and support targeted monitoring.
9.5: List of main conservation measures	MG04 Control/eradication of illegal killing, fishing and harvesting of wild plants, fungi and animals: Wales (as amended) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended), which make it an offence to kill, injure, capture or disturb European marine protected species. Similar legislation exists for Scottish and Northern Irish inshore waters.
9.5: List of main conservation measures	MK01 Reduce impact of mixed source pollution: The impact of chemical pollution on Atlantic white-sided dolphins is an issue (Jepson et al, 2016). However, establishing measures beyond the historic ban on PCB use, has not been achieved to date. Further information is required to

	understand where exposure is occurring to be able to identify appropriate measures.
9.5: List of main conservation measures	MC02 Adapt/manage exploitation of energy resources: Guidance for the protection of marine European Protected Species from deliberate injury, killing and disturbance has been drafted (JNCC 2010a; Marine Scotland, 2014). Marine Industries generate a variety of noise through activities such as geophysical surveys (e.g. seismic surveys), construction (e.g. pile driving) and decommissioning (e.g. use of explosives). As part of the licencing procedures, developers and operators are required to utilise JNCC guidelines to minimise the risk of injury to cetaceans when undertaking such activities (JNCC, 2010b, 2010c; 2017; 2023; 2025; JNCC, Natural England & Cefas, 2025). The guidelines advise on conducting marine mammal observations prior to and during the activity and, where suitable, utilising procedures such as soft start (gradual introduction of the sound) to reduce and avoid direct harm to animals. A review of the marine mammal observer data (e.g. Stone, 2015) demonstrated the effectiveness of soft start approach (Stone et al. 2017). Habitats Regulations Assessments (HRA) and Environmental Impact Assessments (EIA) processes are also applied where plans/projects present the risk of injury, mortality or disturbance within SACs or wider seas as part of the UK's consenting process.
9.5: List of main conservation measures	MC03 Adapt/manage renewable energy installation, facilities and operation (excl. hydropower and abstraction activities): Guidance for the protection of marine European Protected Species from deliberate injury, killing and disturbance has been drafted (JNCC 2010a; Marine Scotland, 2014). Marine Industries generate a variety of noise through activities such as geophysical surveys (e.g. seismic surveys (JNCC 2017)), construction (e.g. pile driving (JNCC 2010b)) and decommissioning (e.g. use of explosives (2010c)). As part of the licencing procedures, developers and operators are required to utilise JNCC guidelines to minimise the risk of injury to cetaceans when

	undertaking such activities (JNCC, 2010b, 2010c; 2017; 2023; 2025; JNCC, Natural England & Cefas, 2025). The guidelines advise on conducting marine mammal observations prior to and during the activity and, where suitable, utilising procedures such as soft start (gradual introduction of the sound) to reduce and avoid direct harm to animals. A review of the marine mammal observer data demonstrated the effectiveness of soft start approach (Stone et al., 2017).
9.5: List of main conservation measures	MG01 Management of professional/commercial fishing, shellfish and seaweed harvesting (incl. restoration of habitats). Fisheries Management Plans (FMPs) are currently being developed across all administrations for fisheries with perceived threats or pressures to the marine environment. FMPs are required under the Fisheries Act 2020 which provides the framework for management fisheries outside the EU Common Fisheries Policy. The Joint Fisheries Statement (agreeing the delivery of the 8 objectives of the Fisheries Act 2020) sets out plans for 43 FMPs. Publication of FMPs started last year and is expected to continue for 2-3 years. Some are being jointly developed, others by a single authority for its own waters. 6 FMPs have now been published.