



License Application for sustainable hand-harvesting of *Ascophyllum nodosum* in Kenmare Bay.

Appendix 6:

Assessment of bird species in Kenmare Bay.

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1. Overview:

This section describes the distribution, conservation status, breeding and wintering requirements of important species of birds in the licence area. This includes species protected under the E.U. Birds Directive and species of general interest. Potential hazards have also been identified and mitigation measures put in place where required.

2. Site Names:

Kenmare River SAC (Site Code 002158).

3. Activity under assessment:

Sustainable hand harvesting of *Ascophyllum nodosum* in Kenmare River SAC and its potential impact on avian species.

4. Assessors:

BioAtlantis Ltd.

5. Scope of current assessment:

The sites under assessment are not designated as a Special Protection Areas (SPA). Therefore, there are no published specifications outlining conservation requirements for bird species within these areas. However, it is still deemed necessary to protect birds during harvest related activities, particularly given the nearby presence of SPAs and a number of proposed Natural Heritage Areas (pNHAs). To conduct this assessment, data was obtained from a range of sources including the Irish Wetland Bird Survey (I-WeBS), a joint scheme of BirdWatch Ireland and the National Parks and Wildlife Service of the Department of Arts, Heritage & the Gaeltacht. I-WeBS describes the broad distribution of a wide range of wintering and breeding bird species within defined areas and subsites in certain cases (personal correspondence with BirdWatch Ireland between 14/05/2015 to 18/06/2020). The focus of I-WeBS is primarily on monitoring wintering waterbirds. Data on the presence of bird species in SACs was also obtained from NPWS (NPWS 2013C and NPWS 2013D). In addition, data was obtained from several other sources and published literature to ensure that species specific and local knowledge was included in the assessment. This includes valuable data submitted by those involved in citizen science projects and staff at the National Biodiversity Data Centre of Ireland (www.biodiversityireland.ie) and datasets emerging from Ireland's BioBlitz (2016) and the Birds of Ireland collation. Credit has been given to the persons who recorded data on site where possible, which includes wildlife enthusiasts and persons identifying birds from aboard research vessels. The Birds of Ireland dataset was collated by the National Biodiversity Data Centre from different sources. A review of the potential impacts of seaweed harvesting was also consulted (Goodship and Furness, 2019), where applicable to the harvesting activities outlined in this application and species reported in the license area. Seventy two bird species in total were assessed, including the recently reintroduced White Tailed Sea Eagle (*Haliaeetus albicilla*). The presence of protected species in nearby SPAs was also included in the assessment due to proximity to Kenmare River SAC, e.g. Iveragh Peninsula SPA [004154], Beara Peninsula SPA, 004155 (Ref: NPWS 2016A-D), Sheep's Head to Toe Head SPA [004156]. The list of species assessed is provided on the next page. A risk assessment was carried out for each species, as described in Table 1. Mitigation measures have been developed in cases where significant risks are identified, also shown in Table 1. Emphasis is placed on ensuring that there are no significant impact on feeding source, habitat loss or disturbance due to human activities.

6. Methodology employed:

Bird species were assessed in terms of their dietary, breeding and wintering requirements. Potential hazards associated with harvesting were assessed for each species, including potential impacts on feeding source, habitat and sensitivity to human disturbance. Mitigation measures were assigned in situations where risk could not be ruled out. The harvesting plan incorporates these measures to ensure protection of these species. Table 1 describes the distribution, requirements, potential hazards and mitigations measures for avian species of interest. In addition, Appendix 4, "Code of Practice", has been developed to ensure the protection of bird species in the SAC.

List of species included in this assessment:

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| 1. Arctic Tern (<i>Sterna paradisaea</i>) | 41. Golden Plover (<i>Pluvialis apricaria</i>) |
| 2. Balearic Shearwater (<i>Puffinus mauretanicus</i>) | 42. Goldeneye (<i>Bucephala clangula</i>) |
| 3. Barn Owl (<i>Tyto alba</i>) | 43. Goosander (<i>Mergus merganser</i>) |
| 4. Barn Swallow (<i>Hirundo rustica</i>) | 44. Great Black-backed Gull (<i>Larus marinus</i>) |
| 5. Barnacle Goose (<i>Branta leucopsis</i>) | 45. Great Crested Grebe (<i>Podiceps cristatus</i>) |
| 6. Bar-tailed Godwit (<i>Limosa lapponica</i>) | 46. Great Northern Diver (<i>Gavia immer</i>) |
| 7. Black Guillemot (<i>Cepphus grylle</i>) | 47. Great Skua (<i>Stercorarius skua</i>) |
| 8. Black-headed Gull (<i>Larus ridibundus</i>) | 48. Green Sandpiper (<i>Tringa ochropus</i>) |
| 9. Black-legged Kittiwake (<i>Rissa tridactyla</i>) | 49. Greenshank (<i>Tringa nebularia</i>) |
| 10. Black-tailed Godwit (<i>Limosa limosa</i>) | 50. Grey Heron (<i>Ardea cinerea</i>) |
| 11. Black-throated Diver (<i>Gavia arctica</i>) | 51. Grey Plover (<i>Pluvialis apricaria</i>) |
| 12. Brent Goose (<i>Branta bernicla hrota</i>) | 52. Grey Wagtail (<i>Motacilla cinerea</i>) |
| 13. Chiffchaff (<i>Phylloscopus collybita</i>) | 53. Hen Harrier (<i>Circus cyaneus</i>) |
| 14. Chough (<i>Pyrrhocorax pyrrhocorax</i>) | 54. Herring Gull (<i>Larus argentatus</i>) |
| 15. Common Eider (<i>Somateria mollissima</i>) | 55. Hooded Crow (<i>Corvus cornix</i>) |
| 16. Common Guillemot (<i>Uria aalge</i>) | 56. House Martin (<i>Delichon urbicum</i>) |
| 17. Common Gull (<i>Larus canus</i>) | 57. House Sparrow (<i>Passer domesticus</i>) |
| 18. Common Kestrel (<i>Falco tinnunculus</i>) | 58. Iceland Gull (<i>Larus glaucoideus</i>) |
| 19. Common Linnet (<i>Carduelis cannabina</i>) | 59. Jay (<i>Garrulus glandarius</i>) |
| 20. Common Sandpiper (<i>Actitis hypoleucos</i>) | 60. Kingfisher (<i>Alcedo atthis</i>) |
| 21. Common Scoter (<i>Melanitta nigra</i>) | 61. Lapwing (<i>Vanellus vanellus</i>) |
| 22. Common Starling (<i>Sturnus vulgaris</i>) | 62. Lesser black-backed Gull (<i>Larus fuscus</i>) |
| 23. Common Swift (<i>Apus apus</i>) | 63. Little egret (<i>Egretta garzetta</i>) |
| 24. Common Tern (<i>Sterna hirundo</i>) | 64. Little Grebe (<i>Tachybaptus ruficollis</i>) |
| 25. Coot (<i>Fulica atra</i>) | 65. Little Gull (<i>Larus minutus</i>) |
| 26. Cormorant (<i>Phalacrocorax carbo</i>) | 66. Little Plover (<i>Charadrius dubius</i>) |
| 27. Corn Crake (<i>Crex crex</i>) | 67. Little Stint (<i>Calidris minuta</i>) |
| 28. Curlew (<i>Numenius arquata</i>) | 68. Little Tern (<i>Sterna albifrons</i>) |
| 29. Curlew Sandpiper (<i>Calidris ferruginea</i>) | 69. Long eared owl (<i>Asio otus</i>) |
| 30. Dipper (<i>Cinclus cinclus</i>) | 70. Mallard (<i>Anas platyrhynchos</i>) |
| 31. Dunlin (<i>Calidris alpina</i>) | 71. Manx Shearwater (<i>Puffinus puffinus</i>) |
| 32. Eurasian Tree Sparrow (<i>Passer montanus</i>) | 72. Meadow Pipit (<i>Anthus pratensis</i>) |
| 33. European Greenfinch (<i>Carduelis chloris</i>) | 73. Mediterranean Gull (<i>Larus melanocephalus</i>) |
| 34. European Shag (<i>Phalacrocorax aristotelis</i>) | 74. Merlin (<i>Falco columbarius</i>) |
| 35. European Turtle Dove (<i>Streptopelia turtur</i>) | 75. Moorhen (<i>Gallinula chloropus</i>) |
| 36. Fulmar (<i>Fulmarus glacialis</i>) | 76. Mute Swan (<i>Eala bhalbh; Cygnus olor</i>) |
| 37. Gadwall (<i>Anas strepera</i>) | 77. Northern Goshawk (<i>Accipiter gentilis</i>) |
| 38. Gannet (<i>Morus bassana</i>) | 78. Oystercatcher (<i>Haematopus ostralegus</i>) |
| 39. Glaucous Gull (<i>Larus hyperboreus</i>) | 79. Peregrine (<i>Falco peregrinus</i>) |
| 40. Goldcrest (<i>Regulus regulus</i>) | 80. Pochard (<i>Aythya ferina</i>) |

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|---|---|
| 81. Puffin (<i>Fratercula arctica</i>) | 103. Skylark (<i>Alauda arvensis</i>) |
| 82. Purple Sandpiper (<i>Calidris maritima</i>) | 104. Smew (<i>Mergellus albellus</i>) |
| 83. Raven (<i>Corvus corax</i>) | 105. Snipe (<i>Gallinago gallinago</i>) |
| 84. Razorbill (<i>Alca torda</i>) | 106. Sparrowhawk (<i>Accipiter nisus</i>) |
| 85. Red breasted merganser (<i>Mergus serrator</i>) | 107. Spotted Flycatcher (<i>Muscicapa striata</i>) |
| 86. Red Grouse (<i>Lagopus lagopus</i>) | 108. Stock Dove (<i>Columba oenas</i>) |
| 87. Red Knot (<i>Calidris canutus</i>) | 109. Stonechat (<i>Saxicola torquata</i>) |
| 88. Redshank (<i>Tringa totanus</i>) | 110. Storm Petrel (<i>Hydrobates pelagicus</i>) |
| 89. Red-throated Diver (<i>Gavia stellata</i>) | 111. Teal (<i>Anas crecca</i>) |
| 90. Redwing (<i>Turdus iliacus</i>) | 112. Tufted Duck (<i>Aythya fuligula</i>) |
| 91. Ring Ouzel (<i>Turdus torquatus</i>) | 113. Turnstone (<i>Arenaria interpres</i>) |
| 92. Ring-billed Gull (<i>Larus delawarensis</i>) | 114. Twite (<i>Carduelis flavirostris</i>) |
| 93. Ringed Plover (<i>Charadrius hiaticula</i>) | 115. Velvet Scoter (<i>Melanitta fusca</i>) |
| 94. Rock Pipit (<i>Anthus petrosus</i>) | 116. Wheatear (<i>Oenanthe oenanthe</i>) |
| 95. Roseate Tern (<i>Sterna dougallii</i>) | 117. Whinchat (<i>Saxicola rubetra</i>) |
| 96. Sand Martin (<i>Riparia riparia</i>) | 118. White Tailed Sea Eagle (<i>Haliaeetus albicilla</i>) |
| 97. Sanderling (<i>Calidris alba</i>) | 119. Whooper Swan (<i>Cygnus cygnus</i>) |
| 98. Sandwich Tern (<i>Sterna sandvicensis</i>) | 120. Wigeon (<i>Anas Penelope</i>) |
| 99. Scaup (<i>Anas marila</i>) | 121. Willow Warbler (<i>Phylloscopus trochilus</i>) |
| 100. Shelduck (<i>Tadorna tadorna</i>) | 122. Wood Pigeon (<i>Columba palumbus</i>) |
| 101. Short-eared Owl (<i>Asio flammeus</i>) | 123. Woodcock (<i>Scolopax rusticola</i>) |
| 102. Shoveller (<i>Anas clypeata</i>) | 124. Yellowhammer (<i>Emberiza citrinella</i>) |

7. Results of assessment and mitigation measures

(a) Summary of risk assessment and mitigation measures:

Mitigation measures were developed for n=29 species including but not limited to: Arctic Tern (*Sterna paradisaea*), Bar-tailed Godwit (*Limosa lapponica*), Black-headed Gull (*Larus ridibundus*), Black-tailed Godwit (*Limosa limosa*), Brent Goose (*Branta bernicla hrota*), Common gull (*Larus canus*), Common Sandpiper (*Actitis hypoleucos*), Common Tern (*Sterna hirundo*), Cormorant (*Phalacrocorax carbo*), Dunlin (*Calidris alpina*), Goldeneye (*Bucephala clangula*), Great Black-backed Gull (*Larus marinus*), Green Sandpiper (*Tringa ochropus*), Greenshank (*Tringa nebularia*), Little Tern (*Sterna albifrons*), Manx Shearwater (*Puffinus puffinus*), Mediterranean Gull (*Larus melanocephalus*), Oystercatcher (*Haematopus ostralegus*), Red Knot (*Calidris canutus*), Redshank (*Tringa tetanus*), Ringed Plover (*Charadrius hiaticula*), Rock Pipit (*Anthus petrosus*), Roseate Tern (*Sterna dougallii*), Sandwich Tern (*Sterna sandvicensis*), Scaup (*Anas marila*), Shelduck (*Tadorna tadorna*), Storm Petrel (*Hydrobates pelagicus*), Turnstone (*Arenaria interpres*) and White Tailed Sea Eagle (*Haliaeetus albicilla*).

(i) General mitigation measures

- Mitigation measures below were developed based on the outcome of a hazard risk assessment of bird species. While mitigation measures may require that harvesting be restricted at certain sites/times of the year, access to established piers, quays and harbours within the licence area is permitted all year round. General mitigation measures outlined below must be adhered to throughout Kenmare River SAC. See Appendix 7 to the main application document for more details.
- Always follow pre-planned harvest schedules provided by BioAtlantis.

- Harvesting cannot take place at the following SPAs at any time: Iveragh Peninsula SPA, including Derrynane Bay and nearby rocky islands (site code 004154), Deenish Island and Scariff Island SPA (site code 004175), Beara Peninsula SPA (site code 004155), Sheep's Head to Toe Head SPA (site code 004156) & Three Castle Head to Mizen Head SAC (Site Code: 000109).
- Harvesting activities are prohibited at a number of important breeding sites for certain periods during Spring/Summer (see table 2 for details).
- Harvest activities are prohibited at a number of wintering sites during certain periods of autumn/winter (see table 2 for details).
- To minimise disturbance of birds, ensure that all activities on islands are maintained within the intertidal *Ascophyllum nodosum* zone.
- Estuarine areas containing soft mud or marsh: The following species are potentially vulnerable to human disturbance in estuarine areas: Bar-tailed Godwit (*Limosa lapponica*), Black-headed Gull (*Larus ridibundus*), Black-tailed Godwit (*Limosa limosa*), Brent Goose (*Branta bernicla hrota*), Dunlin (*Calidris alpina*), Goldeneye (*Bucephala clangula*), Green Sandpiper (*Tringa ochropus*), Greenshank (*Tringa nebularia*), Mediterranean Gull (*Larus melanocephalus*), Oystercatcher (*Haematopus ostralegus*), Red Knot (*Calidris canutus*), Redshank (*Tringa tetanus*), Scaup (*Anas marila*), Shelduck (*Tadorna tadorna*). Shelduck, Black-tailed Godwit, Redshank and Bar-tailed Godwit are sensitive during feeding. Black-tailed Godwit and Oystercatcher are sensitive during roosting. To prevent disturbance to these species, the following must be observed:
 - Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughty River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary, and all other rivers. Ensure caution if in the vicinity of these areas between May-Aug.
 - Avoid approaching, chasing, scaring or putting birds to flight at any time.

(ii) Species specific mitigation measures

- **Arctic Tern (*Sterna paradisaea*):** Human presence may lead to trampling of nests. Therefore:
 - No harvest during breeding season (Mar-Sept) at sites of relevance: Eyeries Island, Spanish Island, Brennel Island, Rossdohan Island pNHA.
 - Harvesters must avoid areas of coast beyond the intertidal zone between Mar-Sept, thus avoiding contact with nests on ground areas beyond the high tide mark.
 - Avoid approaching, chasing, scaring or putting birds to flight at any time.
- **Black-headed Gull (*Larus ridibundus*):** May be sensitive to human presence. Therefore:
 - During breeding season (Mar- Sept), harvesters must ensure the following:
 - ◆ Keep distance from colonies of black-headed gull.
 - ◆ Avoid approaching, chasing, scaring or putting birds to flight at any time.
 - Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of rivers in Kenmare Bay (described above).
- **Brent Goose (*Branta bernicla hrota*):** May be sensitive to human presence. Therefore:
 - Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of rivers in Kenmare Bay (described above).

- Avoid approaching, chasing, scaring or putting birds to flight at any time, including roosting or feeding birds.
- If approaching shore at high tide, move slowly and keep distance from groups of resting birds.
- Avoid shores at dusk or night, where possible.
- **Common gull (*Larus canus*):** Intensive human activity can cause nest desertion. Therefore:
 - Shingle banks will be avoided between March to September.
- **Common Sandpiper (*Actitis hypoleucos*):** Breeding birds vulnerable to disturbance. Therefore:
 - Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.
- **Common Tern (*Sterna hirundo*):** Human disturbance at nesting colonies can lead to abandonment of nest or chicks. Therefore:
 - No harvest during breeding season (Mar-Oct) at sites of relevance: Eyeries Island, Spanish Island, Brennel Island.
 - Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.
 - Avoid approaching, chasing, scaring or putting birds to flight at any time.
- **Cormorant (*Phalacrocorax carbo*):** Human presence may cause birds to leave nests. Therefore:
 - There must be no harvest during breeding season (April-July) at sites of relevance: Kilmackilloge harbour, Ardgroom Harbour, Coulagh Bay, Kilcatherine point to Doonagh, Lehid Harbour, Ardea West, Oysterbed (Sneem) and Iveragh Peninsula SPA.
 - Avoid approaching, chasing, scaring or putting roosting or feeding birds to flight at any time.
- **Goldeneye (*Bucephala clangula*):** May be sensitive to human presence. Therefore:
 - Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of rivers in Kenmare Bay (described above).
 - Avoid approaching, chasing, scaring or putting roosting or feeding birds to flight at any time.
- **Great Black-backed Gull (*Larus marinus*):** Human presence can cause nest abandonment. Therefore:
 - Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests the high tide mark.
 - During breeding season (Mar- Sept), harvesters must ensure the following:
 - ◆ Keep distance from colonies of Great Black-backed Gull.
 - ◆ Avoid approaching, chasing, scaring or putting birds to flight at any time.
- **Little Tern (*Sterna albifrons*):** Human disturbance can lead to nest failures. Therefore:
 - No harvest during breeding season (April-August) at sites of relevance: Kenmare: Eyeries Island, Spanish Island, Brennel Island.
 - Beaches will be avoided all year round.
 - Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.
 - Avoid approaching, chasing, scaring or putting birds to flight at any time.

- **Manx Shearwater** (*Puffinus puffinus*): vulnerable to human disturbance at nesting sites. If disturbed they may leave the nest. Harvesters must stay clear of sea cliffs or burrow-like habitats which occur on islands or inland in areas beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.
- **Mediterranean Gull** (*Larus melanocephalus*): Vulnerable during breeding season. Therefore:
 - Avoid thickets, reed beds and other areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.
 - Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of rivers in Kenmare Bay (described above).
 - Avoid approaching, chasing, scaring or putting birds to flight at any time.
- **Oystercatcher** (*Haematopus ostralegus*): Human presence may alter behaviour and disturbance may lead to flight events. Therefore:
 - Open sandy coasts, beaches, dunes and salt marsh areas will be avoided all year round.
 - Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of rivers in Kenmare Bay (described above).
 - When approaching shore at high tide, move slowly and keep distance from groups of resting birds.
 - Avoid approaching, chasing, scaring or putting roosting or feeding birds to flight at any time.
- **Ringed Plover** (*Charadrius hiaticula*): May be sensitive to humans disturbance. Human presence may affect breeding pairs. Therefore:
 - Exposed sandy beach areas will be avoided all year round.
- **Rock Pipit** (*Anthus petrosus*): in addition to a range of other invertebrates within the intertidal zone this species may also feed on periwinkles. Potentially vulnerable to disturbance by holiday makers during breeding season:
 - As outlined above, harvest must be undertaken in a manner which ensures canopy coverage is maintained and interactions with resting periwinkles is avoided.
 - As a general policy, hand harvesters will avoid sites where tourism, sport, recreation and excursion activities are observed to be taking place.
- **Roseate Tern** (*Sterna dougallii*): Human presence may lead to trampling of nests. Therefore,
 - Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.
 - Avoid approaching, chasing, scaring or putting birds to flight at any time.
- **Sandwich Tern** (*Sterna sandvicensis*): Vulnerable to human disturbance (e.g. tourists) near breeding colonies on beaches early in the breeding season. Therefore:
 - No harvest during breeding season (March-September) at sites of relevance: Eyeries Island, Spanish Island, Brennel Island, Coornagillagh.
 - Beaches will be avoided all year round.
 - Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.

- Avoid approaching, chasing, scaring or putting birds to flight at any time.
- **Scaup (*Anas marila*):** Susceptible to disturbance by human presence. Therefore:
 - Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of rivers in Kenmare Bay (described above).
 - When approaching shore at high tide, move slowly and keep distance from groups of resting birds.
 - Avoid approaching, chasing, scaring or putting roosting or feeding birds to flight at any time.
- **Storm Petrel (*Hydrobates pelagicus*):** recreational human disturbance can affect the reproductive success of nesting storm petrel. Harvesters must stay clear of sea cliffs or burrow-like habitats which occur on islands or inland in areas beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.
- **Turnstone (*Arenaria interpres*):** This species tends to be faithful to wintering sites and is particularly sensitive to human disturbance when resting/rooting at night and at high tide. Therefore:
 - Avoid shores at dusk or night.
 - If approaching shore at high tide, move slowly and keep distance from groups of resting birds.
 - Avoid approaching, chasing, scaring or putting roosting or feeding birds to flight at any time.
- **White Tailed Sea Eagle (*Haliaeetus albicilla*):** Frequent human disturbance can cause breeding failures. Therefore harvesters must ensure the following between February to August:
 - Keep distance from perched eagles.
 - Avoid approaching, chasing, scaring or putting birds to flight at any time.

(b) Detailed risk assessment and mitigation measures.

Table 1: Distribution, requirements and mitigation measures for avian species of interest in the licence area.

* Unless otherwise stated, the general winter distribution of species was determined from I-WeBS database (Sept-March surveys). Specific sites of relevance were determined from I-WeBS database unless stated otherwise. Distributions are provided for Kenmare River SAC and relevant sites, SPAs and pNHAs within the SAC or in close proximity.

† Information relating to species life cycle, conservation status, etc, are derived from www.birdwatchireland.ie and additional sources as indicated. See reference section for full list of citations.

“BoCCI4, 2020-2026” denotes conservation status according to the “Birds of Conservation Concern in Ireland 2020-2026” assessment (Gilbert et al., 2021).

‡ All mitigation measures are included in the Code of Practice (Appendix 4). Red shading of boxes denotes potential for interaction and requirement for mitigation measures. Green shading denotes absence of interaction and no requirement for mitigation. While mitigation measures may require that harvesting be restricted at certain sites/times of the year, access to established piers, quays and harbours within the licence area is permitted all year round.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
1	Arctic Tern (<i>Sterna paradisaea</i>)	Summer (Mar-Sept)	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Fish, crustaceans & insects.	Mar-Sept: Nests on the ground beyond the high tide mark (coast & inland).	Both hemispheres.	General distribution: <ul style="list-style-type: none"> 95+ pairs in 2008 (Common/Arctic Tern, NPWS 2013C; summer counts). Sites of relevance: <ul style="list-style-type: none"> Rocky islands in Derrynane Bay (Iveragh Peninsula SPA, NPWS 2013C). Deenish and Scariff Island SPA (NPWS 2015E). Eyeries Island pNHA (NPWS 2013C; SMP, 2010). Spanish Island pNHA (NPWS 2013C; SMP, 2010; Goodwillie, 1972). Brennel Island (ref: NPWS 2013C; SMP, 2010). Rossdohan Island pNHA (NPWS 2009A). Kenmare Estuary. 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Human presence may lead to trampling of nests. The species is highly territorial and may attack people. Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	<ul style="list-style-type: none"> No harvesting at Iveragh Peninsula SPA [004154]. No harvesting at Deenish and Scariff Island SPA [004175]. No harvesting during breeding season (Mar-Sept) at sites of relevance. Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark. Avoid approaching, chasing, scaring or putting birds to flight at any time.
2	Balearic Shearwater (<i>Puffinus</i>)	Scarce passage	Red conservation	Small fish such as sardines, as well	Balearic Islands in the western	Open ocean of the	General distribution: Reported as occurring in winter along outer reaches of the bay	Feeding source: no impact. Habitat loss: no impact.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
	<i>mauretanicus</i>)	migrant off Irish coasts from July to November. Rare offshore during winter and spring.	status in Ireland. (BoCCI4, 2020-2026)	as squid and small crustaceans.	Mediterranean.	western Mediterranean and east Atlantic.	Sites of relevance: Recorded near Dursey Island.	Human disturbance: no impact. Disturbance is highly unlikely as the species is distributed in areas outside the <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
3	Barn Owl (<i>Tyto alba</i>)	Mainly central and southern Ireland.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Small mammals and frogs.	Ruined buildings and outbuildings (barns or sheds).	Mainly resident.	General distribution: Reported as present. Sites of relevance: Occurs inland.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
4	Barn Swallow (<i>Hirundo rustica</i>)	Common summer visitor in Ireland from mid-March to late-September.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Insects (midges, flies).	Constructs a bowl-shaped nest out of mud in suitable spots in barns and other buildings.	Southern Africa.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
5	Barnacle Goose <i>(Branta leucopsis)</i>	Winter	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Feed on grasses and sedges on the tundra during breeding season & coastal areas during winter.	Greenland, Siberia & area around Baltic Sea.	Oct-Mar: Mainly remote islands, free from disturbance.	General distribution: Not reported as being present. Sites of relevance: n/a	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Sensitive to human disturbance. There are no sites of relevance in the area, therefore disturbance is highly unlikely to occur. There is no significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
6	Bar-tailed Godwit <i>(Limosa lapponica)</i>	Winter	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Feed on Polychaete at the tidal edge and ragworms and bivalves on muddy estuaries	Norway and Finland.	Oct-April: Coastal regions, mainly estuaries.	General distribution: • Peak annual counts ranging from n=2 to n=5 between 1994/95 and 2010/11; winter counts. Sites of relevance: • Derrynane Bay (Iveragh Peninsula SPA). • Kenmare Estuary.	Feeding source: no impact Habitat loss: no impact Human disturbance: species can be sensitive to human disturbance when resting and feeding and are vulnerable to human leisure activities (Kirby JS <i>et al.</i> , 1993; and Holden and Housden, 2016, pg. 107). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on food source or habitat. This	<ul style="list-style-type: none"> • No harvesting at Iveragh Peninsula SPA [004154]. • Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughty River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
7	Black Guillemot <i>(Cepphus grylle)</i>	Resident along all Irish coasts.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Fish and crustaceans (Marine)	Nests at cliff bases, in rock crevices and within man-made structures (e.g. piers).	Mainly winters in same area as breeding sites.	General distribution: <ul style="list-style-type: none"> Recorded as present (NPWS, 2013B & ref. therein). Sites of relevance: <ul style="list-style-type: none"> Ardgroom (SMP, 2010). Eyeries (SMP, 2010) Kilcatherine point to Doonagh (Heardman 2007). Iveragh Peninsula SPA (NPWS, 2015B; NPWS, 2015F). Deenish and Scariff Island SPA (NPWS 2015E). Lower Beelihane (Mahony, 2016) 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely given that (a) the species is mainly distributed on cliffs during breeding season, outside the <i>A. nodosum</i> zone, (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur and (c) given the low number of boats and people involved. There is no significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
8	Black-headed Gull <i>(Larus ridibundus)</i>	Resident all year round	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Insects (arable field). Domestic & fisheries waste.	Breeds on coast and inland. Nests on ground in colonies in a variety of areas: lake margins, lagoons, slow-flowing rivers, deltas, estuaries, tussocky marshes, saltmarshes	Numbers increase due to migrations. Preference for inlets or estuaries with sandy or muddy beaches, generally avoiding	General distribution: <ul style="list-style-type: none"> N=90 counts in 2010/2011; winter counts. Sites of relevance: <ul style="list-style-type: none"> Kilmackilloge harbour. Ardgroom Harbour Dinish Island. Rosdohan Island pNHA (NPWS, 2009A). Spanish Island (SMP, 2010). Lehid Harbour, Tuosist (Moore F, 2012-2013). Kilmackilloge Harbour 	Feeding source: no impact Habitat loss: no impact Human disturbance: While potentially vulnerable to disturbance by people and boats, significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur.	<ul style="list-style-type: none"> No harvesting at Beara Peninsula SPA [004155]. During breeding season (Mar- Sept), harvesters must ensure the following: <ul style="list-style-type: none"> ➢ Keep distance from colonies of black-headed gull. ➢ Avoid approaching, chasing, scaring or putting birds to flight at any time. Estuarine areas containing

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
					coastal dunes and offshore islands.	rocky or exposed coastlines.	(Moore F, 2012-2013). • Pallas Strand, Eyeries (Moore F, 2012-2013). • Beara Peninsula SPA [004155].	Storm cast algae will not be harvested. There is no significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughy River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug.
9	Black-legged Kittiwake (<i>Rissa tridactyla</i>)	Summer visitor to steep coastal cliffs along all Irish coasts.	Red conservation status in Ireland. (BoCCl4, 2020-2026)	Fish, waste from commercial fishing and invertebrates	Breeds on steep sea cliffs.	At sea.	General distribution: • Reported as present (Balmer et al., 2013). Sites of relevance: • Iveragh Peninsula SPA (site code: 004154, NPWS, 2015F).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The species occupies a broad range of coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. Significant disturbance due to hand harvesting is also highly unlikely, given the low number of boats and people involved. Storm cast algae will not be harvested. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
10	Black-tailed Godwit (<i>Limosa limosa</i>)	Mainly in winter, particularly	Red conservation status in	Invertebrates, bivalves, polychaete	Breed in marshes and lowland wet	Winters inland and on estuarine	General distribution: • Peak annual counts of n=2 between 1994/95 and	Feeding source: no impact. Habitat loss: no impact. Human disturbance:	• Estuarine areas containing soft mud or marsh will be avoided during winter

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> [†]	Mitigation measures [‡]
		September.	Ireland. (BoCCI4, 2020-2026)	worms and shore crabs in muddy estuaries, brackish pools. Feed on species in rough pastures also.	grasslands.	coast.	2010/11; winter counts. Sites of relevance: unknown.	Disturbance is unlikely to be significant as the species also occurs inland and is not restricted to the intertidal zone. It is rarely found on sandy beaches and avoids rocky shores (Wilson J, 2011) where <i>A. nodosum</i> is found. The species is sensitive to human activity when feeding or roosting (Wilson J, 2011) at estuarine mudflats. There is no significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	(Sept-April) at the mouths of Roughy River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug.
11	Black-throated Diver (<i>Gavia arctica</i>)	A scarce winter visitor to western & northern coasts.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Mainly fish.	No confirmed breeding records from Ireland.	Oct-April: Feed in Irish waters over the winter.	General distribution: Not reported as being present. Sites of relevance: n/a.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. May be vulnerable to recreational sports at sea (Holden & Housden, 2016, pg. 53). Disturbance due to hand harvesting is highly unlikely given the low number of boats and people involved. The species is present in small numbers in winter, occupying a broad range of habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
12	Brent Goose (<i>Branta bernicla hrota</i>)	Winter (Oct -Mar)	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Winter: Feeds mostly on eel-grass growing on muddy estuaries, and on grasslands when coastal supplies have been depleted at estuarine sites. May feed on green algae (<i>Ulva</i> spp).	Nests at coastal tundra, with pools and small inlets.	Coastal estuaries (autumn-early winter) Grasslands (mid-winter late April).	General distribution: Reported as present (roving records). Sites of relevance: unknown.	Feeding source: Potential impact on algae as secondary food source (ref: NPWS 2013). Habitat loss: no impact. Human disturbance: Disturbance may lead to flight events (Phalan B & Nairn RGW 2007). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. Eelgrass and green seaweed (<i>Ulva</i> spp.) will not be harvested or affected by harvesting activities. The sustainable nature of the hand harvesting plan ensures no impacts on availability of <i>A. nodosum</i> or any other seaweeds. There is no significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat	Avoid estuarine areas containing soft mud or marsh at the mouths of rivers between Sept-April. Ensure caution if in the vicinity of these areas between May-Aug. Avoid approaching, chasing, scaring or putting birds to flight at any time, including roosting or feeding birds. If approaching shore at high tide, move slowly and keep distance from groups of resting birds. Avoid shores at dusk or night, where possible.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								type.	
13	Chiffchaff (<i>Phylloscopus collybita</i>)	Summer visitor	Green-listed in Ireland.	Insects and other invertebrates.	April-Sept: Deciduous woodlands and well vegetated hedgerows.	Most of the Irish population migrate to the Mediterranean in winter.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs largely inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
14	Chough (<i>Pyrrhocorax pyrrhocorax</i>)	Resident along rocky coasts.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Varied: insects, larvae, worms, berries, grain, small mammals and birds.	Nests along coasts in caves or crevices.	Coastal areas relatively close to breeding sites.	General distribution: • Reported as present in Kenmare (NPWS 2013B & references therein). Sites of relevance: • Iveragh Peninsula SPA (NPWS, 2015B; NPWS, 2015F). • Deenish and Scariff Island SPA (NPWS 2015E). • Glanmore Bog SAC (NPWS, 2016B). • Inishfarnard (Walsh D, 2013).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species is mainly distributed, outside the <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
15	Common Eider (<i>Somateria mollissima</i>)	Resident along rocky coasts in the north and north-west of Ireland.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Dives in waters up to 20m depth, feeding mainly on mussels, molluscs, crustaceans and echinoderms.	Nest on offshore islets, along low-lying coast, where threat of mammalian predation is minimal.	Shallow, inshore waters, near estuary mouths, mainly along northwest and northeast coastlines.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely, as the species is not reliant on the <i>A. nodosum</i> zone, diving in waters up to 20m in depth to feed. Disturbance events are also highly unlikely given the	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								low number of boats and people involved. Dietary requirements are varied and will not be affected by harvesting activities. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
16	Common Guillemot (<i>Uria aalge</i>)	Resident, occurring inshore/ land during breeding season (March/April to August/September).	Amber conservation status in Ireland.	Fish and invertebrates (caught by surface diving).	Nests on cliff ledges.	Winters at sea.	General distribution: Reported as present. Sites of relevance: unknown. Mainly occurs on open sea, outside the breeding season.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species winters in deep open waters outside the <i>A. nodosum</i> zone, and nests on cliff ledges in exposed areas where <i>A. nodosum</i> is not located. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
17	Common Gull (<i>Larus canus</i>)	Resident all year round	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Insects, invertebrates, fish	Nest on ground (cliffs, islands, shingle banks) Egg laying between May-June, with 22-28 days incubation	Numbers increase in winter due to migrations from other regions.	General distribution: • Peak counts of n=13 to n=42 (1994-1998; winter counts). Sites of relevance: • Ardroom Harbour (Heardman 2007). • Lehid Harbour, Tuosist (Moore F, 2012-2013).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Intensive human activity can cause nest desertion (Anon, 2009). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of	• Shingle banks will be avoided between March to September.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
					and fledgling at ~35 days (Anon, 2009).		<ul style="list-style-type: none"> • Kilmackilloge Harbour (Moore F, 2012-2013). • Pallas Strand, Eyeries (Moore F, 2012-2013). • Kenmare Estuary. 	<p>boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur.</p> <p>Storm cast algae will not be harvested. There is no significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	
18	Common Kestrel (<i>Falco tinnunculus</i>)	Widespread resident in Ireland.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Small mammals, insects, invertebrates and birds.	Nests in trees, buildings or in cracks in cliffs. Found in wide variety of open habitats e.g. coasts, moorland, farmland, wetlands, roadside verges and parks.	Mainly resident within breeding territory.	<p>General distribution: Reported as present.</p> <p>Sites of relevance: Occurs mainly inland.</p>	<p>Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact.</p> <p>Disturbance is highly unlikely as the species occurs largely inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	Mitigation not required.
19	Common Linnet (<i>Carduelis cannabina</i>)	Widespread resident.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Seeds, split grain, buds and some insects.	Rough grassland, uplands and in coastal areas with gorse.	Mainly resident within Ireland.	<p>General distribution: Reported as present.</p> <p>Sites of relevance: unknown.</p>	<p>Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact.</p> <p>Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or</p>	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
20	Common Sandpiper <i>(Actitis hypoleucos)</i>	March to September	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Flies and aquatic insects	Mar-Sept: Nests inland, on coast, near rivers, lakes, beaches. Nest is a shallow depression, often amongst shrubs and trees (Birdlife Int., 2016E & ref. therein).	Small numbers winter in Ireland.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: • Kenmare Estuary.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Breeding populations may be vulnerable to recreational disturbance activities such as anglers (Birdlife international, 2016E and references therein, Holden and Housden, 2016, pg. 112). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	• Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.
21	Common Scoter <i>(Melanitta nigra)</i>	Resident and winter visitor to Irish coasts between October and April.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Summer: water plants, insect larvae and freshwater crustaceans. Winter: forage in waters <20m	Nest on islands with dense covering of scrub and tree cover.	Mainly marine in winter. Congregate in large flocks on shallow seas with sandy bottoms	General distribution: Reported as present. Sites of relevance: unknown. Reported to occur near Dinish Island (Moore F, 2012-2013).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Although Common scoter forage in inshore waters, significant impacts due to human disturbance are highly	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
				deep and with coarse sandy substrates, feeding mainly on benthic bivalve molluscs.		supporting their Prey.		unlikely given the following: (a) the low number of boats and people involved in hand harvesting and (b) the species is not reliant on the <i>A. nodosum</i> zone, diving in waters up to 20m deep with coarse sandy substrates to feed. There is no significant risk of harvest activities impacting on feeding source or habitat. Dietary requirements are varied and include non- <i>A. nodosum</i> habitats (e.g. 20m deep with coarse sandy substrates), which will not be affected by harvesting activities. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
22	Common Starling <i>(Sturnus vulgaris)</i>	Common resident in Ireland.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Forages in wide variety of situations: grassland in parks, gardens, farmland, trees, streets, refuse tips and on the strandline (both plant and animal material, including invertebrates, fruits, cereals and seeds).	Widespread, found in the countryside, woodland, farmland, town and city areas. Breeds in Ireland, in holes or crevices in buildings and in trees.	Widespread in the winter	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
23	Common Swift (<i>Apus</i>)	Summer	Red	Invertebrates	Breeds in	Tropical	General distribution: Reported	Feeding source: no impact.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
	<i>apus</i>)	visitor to Ireland from May to September.	conservation status in Ireland. (BoCCI4, 2020-2026)	(e.g. midges, flies, spiders).	Ireland (small recesses in buildings) and less frequently in holes in trees or caves in upland/coastal areas.	Africa.	as present. Sites of relevance: Occurs mainly inland.	Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs largely inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
24	Common Tern <i>(Sterna hirundo)</i>	Summer (Mar- Oct)	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Mainly fish.	Mar-Oct: Nests on the ground (coast & inland).	West and south Africa	General distribution: <ul style="list-style-type: none"> 95+ pairs in 2008 (Common/Arctic Tern, ref: NPWS 2013C, summer counts). Sites of relevance <ul style="list-style-type: none"> Rocky islands in Derrynane Bay (Iveragh Peninsula SPA, NPWS, 2013C). Eyeries Island pNHA (NPWS 2013C). Spanish Island pNHA (NPWS 2013C; SMP, 2010; Goodwillie, 1972). Brennel Island (NPWS, 2013C). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Human disturbance at nesting colonies can lead to abandonment of nest or chicks. Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species generally occurs in other non- <i>A. nodosum</i> habitats. There is no significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	<ul style="list-style-type: none"> No harvesting at Iveragh Peninsula SPA [004154]. No harvest during breeding season (Mar- Oct) at sites of relevance. Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark. Avoid approaching, chasing, scaring or putting birds to flight at any time.
25	Coot (<i>Fulica atra</i>)	Resident at ponds and lakes throughout Ireland,	Amber conservation status in Ireland.	Omnivorous. Feeds on water on plant shoots, seeds, insects,	Nests inland along large shallow water bodies.	Found on lakes, coastal estuaries and river	General distribution: Not reported as being present. Sites of relevance: n/a	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Impacts due to human	<ul style="list-style-type: none"> Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
		augmented by visitors between Sept. to April.	(BoCCI4, 2020-2026)	algae and fish.		systems, with clear preference for large inland lakes.		disturbance are highly unlikely, as it occupies a broad range of inland habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvesting impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
26	Cormorant <i>(Phalacrocorax carbo)</i>	Resident all year round	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Fish.	April-July: Cliffs (coast) or in trees (inland).	At sea and inland.	General distribution: <ul style="list-style-type: none"> • Peak counts of n=2 to n=6 per annum between 1994 - 2011; winter counts. Sites of relevance: <ul style="list-style-type: none"> • Kilmackilloge harbour. • Ardgroom Harbour (Heardman 2007). • Coulagh Bay (Heardman 2007) • Kilcatherine point to Doonagh (Heardman 2007). • Lehid Harbour, Tuosist (Moore F, 2012-2013). • Ardea West, Tuosist (Moore F, 2012-2013). • Oysterbed, Sneem (Sweeney S, 2015). • Iveragh Peninsula SPA (NPWS, 2015B; NPWS, 2015F). • Deenish and Scariff Island SPA (NPWS 2015E). • Blackwater Bridge (Mahony, 2016). • Westcove, Castlecove 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Human presence may cause cormorants to leave nests. Cormorants may face some pressures due to real or perceived conflict with anglers (Holden & Housden, 2016, pg. 66). While potentially vulnerable to disturbance by people and boats, significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. While nests may be partially composed of seaweed, the sustainable nature of the hand harvesting plan ensures no	<ul style="list-style-type: none"> • No harvesting at Iveragh Peninsula SPA [004154]. • No harvesting at Deenish and Scariff Island SPA (004175). • No harvesting at Beara Peninsula SPA [004155]. • No harvesting at Three Castle Head to Mizen Head SAC (000109). • No harvest during breeding season (April-July) at sites of relevance. • Avoid approaching, chasing, scaring or putting roosting or feeding birds to flight at any time.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
							(Mahony, 2017). <ul style="list-style-type: none"> • Tuosist (Brazier, 2017). • Kenmare Estuary. • Beara SPA [004155]. 	impacts on availability of <i>A. nodosum</i> or any other seaweeds. Cormorant feed in subtidal waters. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
27	Corn Crane (<i>Crex crex</i>)	Summer visitor (April to September).	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Insects, slugs, snails, earthworms, seeds of grasses and sedges.	Nests on the ground in tall vegetation (mainly in hay fields).	Africa.	General distribution: Reported as present. Sites of relevance: Occurs inland.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
28	Curlew (<i>Numenius arquata</i>)	Mainly a winter visitor to wetlands Breeds in low numbers (floodplains boglands).	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Mainly invertebrates, e.g. ragworms, crabs, molluscs. Feed in estuaries. Roost communally, usually along salt marshes and sand banks.	Ground nesting (rough pastures, meadows, heather).	Coastal and inland wetland habitats.	General distribution: <ul style="list-style-type: none"> • Peak annual counts ranging from n=2 to n=77 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> • Kilmackilloge harbour. • Dinish Island. • Roughty River Estuary pNHA (NPWS 2009F). • Bidaun Beg (Walsh D, 2013). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The species occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. Moreover,	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
							<ul style="list-style-type: none"> • Illaunleagh (Walsh D, 2013). • 2m Island (Walsh D, 2013). • Derrynane Bay (Iveragh Peninsula SPA, 004154). • Kenmare Estuary. 	<p>significant disturbance due to hand harvesting is highly unlikely, given the low number of boats and people involved. While summer breeding populations are sensitive to disturbance, they are mainly found ground nesting (rough pastures, meadows, heather), outside the intertidal zone.</p> <p>Storm cast algae or algae in beach areas will not be harvested. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	
29	Curlew Sandpiper <i>(Calidris ferruginea)</i>	Rare migrant between August and October	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Invertebrates found on mudflats	Does not breed in Ireland.	Scarce. May be found in estuaries and mudflats.	<p>General distribution:</p> <ul style="list-style-type: none"> • Peak annual counts of n=1 between 1994/95 and 2010/11; winter counts. <p>Sites of relevance:</p> <ul style="list-style-type: none"> • Kenmare Estuary. 	<p>Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact.</p> <p>The species does not breed in Ireland. Significant disturbance due to hand harvesting is highly unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species</p>	<p>Mitigation not required. However, measures are in place in the Code of Practice to ensure caution if in the vicinity of estuarine areas between May-Aug.</p>

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
30	Dipper <i>(Cinclus cinclus)</i>	A widespread resident along rocky streams and rivers.	Green-listed in Ireland.	Aquatic invertebrates, e.g. larvae of caddis & mayflies.	Breeds along fast-flowing streams and rivers.	Largely sedentary, movements largely dependent on weather conditions.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: <ul style="list-style-type: none"> Glanmore Bog SAC (NPWS 2016B). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. There is no risk of human disturbance as this species is located inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
31	Dunlin <i>(Calidris alpina)</i>	Mainly occur in mid-winter.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Small invertebrates, polychaete and small gastropods in estuarine mudflats, close to the tide edge.	Ground nesting in sparse vegetation, and Machair, sandy grassland habitats.	Mainly coastal areas such as on tidal mudflats and estuaries.	General distribution: <ul style="list-style-type: none"> Peak annual counts ranging from n=24 to n=90 between 1994/95 and 2013/14; winter counts. Sites of relevance: <ul style="list-style-type: none"> Roughy River Estuary pNHA (NPWS 2009F). Beara Peninsula SPA [004155]. 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Species can be sensitive to human disturbance (Kirby JS <i>et al.</i> , 1993). Recreational activities may disturb roosts, particularly in winter (Holden and Housden, 2016, pg. 101). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. Storm cast algae or algae in beach areas will not be	<ul style="list-style-type: none"> No harvesting at Beara Peninsula SPA [004155]. Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughy River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								harvested. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
32	Eurasian Tree Sparrow (<i>Passer montanus</i>)	Local resident in the east of Ireland, scarce along the south and west coasts.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Seeds, split grain, buds and insects.	Associated with cereal production. Nests in cavity in buildings, under eaves or holes, etc.	Largely sedentary.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
33	European Greenfinch (<i>Carduelis chloris</i>)	Resident.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Seeds, split grain, buds and some insects.	Hedgerows, parks and gardens. Nests of coarse, dead grass and twigs, high in hedge.	Widespread.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat.	Mitigation not required.
34	European Shag (<i>Gulosus aristotelis</i>; <i>Phalacrocorax aristotelis</i>)	Resident along all Irish coasts.	Amber conservation status in Ireland. (BoCCI4, 2020-	Fish taken from just below the surface.	Nests in cliff areas on ledges, in crevasses, in caves or under boulders.	Adults winter in vicinity of breeding colonies, while young	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: • Iveragh Peninsula SPA (NPWS, NPWS, 2015F).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly breeds and is distributed on cliffs and other	Mitigation not required in relation to breeding sites of relevance. However, measures are in place in the Code of Practice to avoid approaching, chasing,

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> [†]	Mitigation measures [‡]
			2026)			disperse.	<ul style="list-style-type: none"> • Deenish and Scariff Island SPA (NPWS 2015E). • Coulagh Bay (Heardman, 2007). • Kilcatherine point to Doonagh (Heardman, 2007). • Inishfarnard (Walsh D, 2013). • Bridaun Beg (Walsh D, 2013). 	<p>areas outside the <i>A. nodosum</i> zone. Mitigation measures are not required to prevent disturbance events at breeding sites, as they are not in proximity to harvesting areas.</p> <p>While potentially vulnerable to disturbance by people and boats, significant disturbance due to hand harvesting is highly unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur.</p> <p>While nests may be partially composed of seaweed, the sustainable nature of the hand harvesting plan ensures no impacts on availability of <i>A. nodosum</i> or any other seaweeds.</p> <p>Cormorant feed in deep subtidal waters. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	scaring or putting roosting or feeding birds to flight at any time; these measures also apply to European Shag.
35	European Turtle Dove (<i>Streptopelia turtur</i>)	Scarce passage	Red conservation	Cereal grain, seeds, fruits of	Does not breed in Ireland on a	Tropical Africa.	General distribution: Reported as present.	Feeding source: no impact. Habitat loss: no impact.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
		migrant in spring and autumn (mainly at headlands on south coast).	status in Ireland. (BoCCI4, 2020-2026)	herbs, grasses and invertebrates.	regular basis. Prefers open lowland areas with deciduous forests and agricultural lands. Breeding records in Counties Dublin, Kerry, Cork, Down and Wexford.		Sites of relevance: Occurs inland.	Human disturbance: no impact. Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
36	Fulmar <i>(Fulmarus glacialis)</i>	Resident along all Irish coasts.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Varied: fish, trawler discard, crustaceans.	Breeds on sea cliffs, nesting at lower level on buildings, burrows and crevasses.	Mainly winters at sea.	General distribution: • Reported as present (NPWS 2013B & references therein). Sites of relevance: • Iveragh Peninsula SPA (NPWS, 2015B; NPWS, 2015F). • Deenish and Scariff Island SPA (NPWS 2015E).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species is mainly distributed on cliffs and other areas outside the <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
37	Gadwall (Anas strepera)	Scarce resident at wetlands, mainly in the south and east of Ireland.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Mixed diet: seeds, insects and aquatic vegetation.	Nests on variety of freshwater and brackish wetlands, including shallow lakes with abundant emergent vegetation, slow moving rivers and marsh	Variety of inland and coastal sites.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland or in areas outside the <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source or habitat. This species	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures†
					habitats.			is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
38	Gannet <i>(Morus bassana)</i>	Resident along all Irish coasts.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Fish	Breeds in colonies on islands off the coast.	Winters at sea.	Breeding colonies located in vicinity of Dursey Island (Ireland's Marine Spatial Planning Portal, 2025).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. It is highly unlikely that this species will be impacted by <i>A. nodosum</i> harvesting as: (a) It nests on islands off the coast. (c) It winters at sea. (d) There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
39	Glaucous Gull (<i>Larus hyperboreus</i>)	Scarce winter visitor to all Irish coasts from October to April.	Green-listed in Ireland.	Omnivorous, scavenging around rubbish tips and harbours.	Does not breed in Ireland.	Winters only marginally south of its breeding range, with few seen in Ireland.	General distribution: reported as being present. Sites of relevance: • Ballycrovane Harbour (Moore F, 2012-2013).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. This species appears relatively tolerant to human-related activities and thus, is highly unlikely to be significantly disturbed by harvest activities. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	• Mitigation not required.
40	Goldcrest (<i>Regulus</i>)	Resident in	Amber	Feeds on insects	Wide variety of	Resident.	General distribution: Reported	Feeding source: no impact.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
	<i>regulus</i>)	Ireland, mainly in coniferous forests.	conservation status in Ireland. (BoCCI4, 2020-2026)	and other invertebrates.	habitats, including broadleaf forests, hedgerows, suburban gardens and dense coniferous woodlands.		as present. Sites of relevance: unknown.	Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
41	Golden Plover <i>(Pluvialis apricaria)</i>	Mainly winter visitor, also present in summer in north west.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Soil and surface-living invertebrates, beetles, earthworms, plant material, berries, seeds, grasses.	Breed in heather moors, blanket bogs & acidic grasslands.	Oct-Feb: Occurs in a variety of habitats, both coastal and inland.	General distribution: reported as being present (Balmer et al., 2013). Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Impacts due to human disturbance are highly unlikely. The species occupies a broad range of coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. Significant disturbance due to hand harvesting is also highly unlikely, given the low number of boats and people involved. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	• Mitigation not required.
42	Goldeneye <i>(Bucephala clangula)</i>	Winter visitor mainly	Red conservation	Invertebrates, crustaceans,	Mainly nests in holes in trees.	Coastal estuaries	General distribution: • Peak annual counts ranging from n=1 to n=10 between	Feeding source: no impact. Habitat loss: no impact.	• Estuarine areas containing soft mud or marsh will be

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
		between November and April.	status in Ireland. (BoCCI4, 2020-2026)	molluscs, small fish, insects.		and inland lakes.	1994/95 and 2010/11. Sites of relevance: • Kenmare Estuary.	Human disturbance: May be sensitive to human disturbance (Hockin D <i>et al.</i> , 1992, and references therein). However, significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	avoided during winter (Sept-April) at the mouths of Roughy River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug. • Avoid approaching, chasing, scaring or putting roosting or feeding birds to flight at any time.
43	Goosander (<i>Mergus merganser</i>)	Resident at larger lakes in. Winter visitor throughout Ireland (Anon, 2013).	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Mainly small and medium sized fish.	Breed on freshwater lakes and pools in some areas (Anon, 2013.	Unfrozen lakes, rivers, lagoons, brackish waters and marshes (BirdLife International, 2016H & references therein).	General distribution: reported as being present (Balmer <i>et al.</i> , 2013). Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Impacts due to human disturbance are highly unlikely, given the low number of boats and people involved. In addition, the species occupies a wide range of coastal habitats & is not limited to the intertidal <i>A. nodosum</i> zone where harvesting will occur. There is no significant risk of harvesting impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat	• Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								type.	
44	Great Black-backed Gull (<i>Larus marinus</i>)	Resident all year round (all Irish coasts).	Green-conservation status.	Fish, Fisheries waste, offal, other birds, food of other birds (kleptoparasitism)	On the ground in difficult to access areas. Also at inland lakes.	Around the coast and inland. On the ground in difficult to access areas. Few in inland lakes.	General distribution: <ul style="list-style-type: none"> Peak counts ranging from n=4 in 1994/95 to n=140 in 1996/97; winter counts. Sites of relevance: <ul style="list-style-type: none"> Kenmare Estuary. Ardgroom Harbour (Heardman 2007). Leahcarrig (Walsh D, 2013). Illeaunleama (Walsh, 2013). Eyeries Island (SMP, 2010). Lehid Harbour, Tuosist (Moore F, 2012-2013). Ardea West, Tuosist (Moore F, 2012-2013). Pallas Strand, Eyeries (Moore F, 2012-2013). Oysterbed (Sweeney, 2015). Derrynane Bay (Iveragh Peninsula SPA). Iveragh Peninsula SPA (NPWS, 2015B; NPWS, 2015F). Deenish and Scariff Island SPA (NPWS 2015E). Killmakilloge Harbour (Moore, 2013). Kenmare sound (Moore, 2012) Beara Peninsula SPA [004155]. Sheep's Head to Toe Head SPA [004156]. 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Human presence can cause abandonment. Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. Storm cast algae will not be harvested. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	<ul style="list-style-type: none"> No harvesting at Iveragh Peninsula SPA [004154]. No harvesting at Deenish and Scariff Island SPA [004175]. No harvesting at Beara Peninsula SPA [004155]. No harvesting at Sheep's Head to Toe Head SPA [004156]. Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests beyond the high tide mark. During breeding season (Mar- Sept), harvesters must ensure the following: <ul style="list-style-type: none"> ➢ Keep distance from colonies of Great Black-backed Gull. ➢ Avoid approaching, chasing, scaring or putting birds to flight at any time.
45	Great Crested Grebe (<i>Podiceps cristatus</i>)	Resident, with migrants also arriving in winter.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Fish and aquatic invertebrates.	Breed on large, shallow lakes, along canals, rivers and wetlands. Usually nests within reeds.	Mainly in north midlands and northeast and occasionally	General distribution: <ul style="list-style-type: none"> Peak annual counts of n=1 between 1994/95 and 2010/11; winter counts. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. While potentially vulnerable to disturbance by people and boats, significant disturbance	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
						on coastal areas.		due to hand harvesting is highly unlikely, given (a) the low number of boats and people involved and (b) The species occupies a broad range of coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
46	Great Northern Diver <i>(Gavia immer)</i>	Winter (Sept -April)	Amber-conservation status	Mostly fish Also crustaceans, molluscs, annelids, insects, amphibians	Iceland, Greenland, North America	Between Sept –April the species occupies a variety of Irish coastlines, such as deep bays, inlets and shallow bays with sandy shores.	General distribution: <ul style="list-style-type: none"> • Peak counts of n=2 per annum between 1994 and 2011; winter counts. Sites of relevance: <ul style="list-style-type: none"> • Ardgroom Harbour • Dinish Island. • Kenmare Estuary. • Lehid Harbour, Tuosist (Moore F, 2012-2013). • Ardea West, Tuosist(Moore F, 2012-2013). • Parknasilla (Sweeney S, 2015). • Kilmackilloge Harbour (Moore F, 2012-2013). • Pallas strand, Eyeries (Moore F, 2012-2013). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. While potentially vulnerable to disturbance by people and boats, significant disturbance due to hand harvesting is highly unlikely, given (a) the low number of boats and people involved and (b) The species occupies a broad range of coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures†
47	Great Skua (<i>Stercorarius skua</i>)	Passage migrant off Irish coasts from April to October. A few pairs breed on isolated islands off the west coast.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Fish taken from other birds or from the sea, or from behind trawlers. Carrion and birds also taken.	One or two pairs breed in Ireland.	Winters out to sea. Usually not visible from land in winter.	General distribution: Occur in deep waters outside Kenmare SAC. Tidal corpse identified at Coss Strand, Templehoe (Moore F, 2012-2013). Sites of relevance: Deep waters outside Kenmare SAC.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs in deep waters outside Kenmare River SAC. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
48	Green Sandpiper (<i>Tringa ochropus</i>)	Scarce passage migrant and winter visitor to wetlands.	Green-conservation status in Ireland.	Invertebrates in mudflats.	Does not breed in Ireland.	Small numbers winter in southern and eastern Counties.	General distribution: reported as being present. Sites of relevance: • Derrynane mudflats, Iveragh Peninsula SPA (Moore F, 2012-2013).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: May fly off with a low zig-zagging flight when disturbed (Anon, 2016B). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughty River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary.
49	Greenshank (<i>Tringa nebularia</i>)	Present at estuaries from September to	Green-conservation status in	Deep water, channels, brackish pools	Scotland and Scandinavia.	September to April. Mainly at	General distribution: • Peak annual counts ranging from n=2 to n=15 between	Feeding source: no impact. Habitat loss: no impact. Human disturbance: While	• No harvesting at Beara Peninsula SPA [004155]. • Estuarine areas containing

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
		April.	Ireland.	and lakes (fish, invertebrates, shrimps, crabs and Hediste sp.)		estuarine coasts.	<p>1994/95 and 2013/14; winter counts.</p> <p>Sites of relevance:</p> <ul style="list-style-type: none"> • Roughty River Estuary pNHA (NPWS 2009F). • Illaunleagh (Walsh D, 2013). • 2m Island (Walsh D, 2013). • Lehid Harbour, Tuosist (Moore F, 2012-2013). • Ardea West, Tuosist (Moore F, 2012-2013). • Kenmare Sound (Moore, 2012). • Kenmare Estuary. • Beara Peninsula SPA [004155]. 	<p>sensitive to human presence, significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur.</p> <p>There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughty River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug.
50	Grey Heron (<i>Ardea cinerea</i>)	Common in wetlands, estuaries and rivers.	Green conservation status in Ireland.	Fish, amphibians, insects reptiles and small mammals. Feeds along the edge of a wide range of wetland habitats (coastal waters, estuaries to loughs, streams and marshy ground).	Found in wetland habitats. Nest located in large trees, on the ground or on cliff edges, in reedbeds or in bushes (BirdLife International, 2016F and references therein).	Found in same wetlands in as in breeding season.	<p>General distribution:</p> <ul style="list-style-type: none"> • Peak annual counts ranging from n=1 to n=6 between 1994/95 and 2010/11; winter counts. <p>Sites of relevance:</p> <ul style="list-style-type: none"> • Dinish Island. • Kenmare Estuary. • Ardgroom Harbour (Heardman 2007). • Glanmore Bog SAC (NPWS, 2016B). 	<p>Feeding source: no impact.</p> <p>Habitat loss: no impact.</p> <p>Human disturbance: no impact.</p> <p>Grey heron are most sensitive to human disturbance during breeding season (Holden & Cleeves, 2006). Disturbance during this period is highly unlikely, as harvesting will not take place inland, near reed beds of cliff edges. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	Mitigation not required.
51	Grey Plover	Mainly present	Red	Beetles and	Breeds in	Present	General distribution:	Feeding source: no impact.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures†
	<i>(Pluvialis apricaria)</i>	between October to February, with some migrants during summer.	conservation status in Ireland. (BoCCI4, 2020-2026)	earthworms, plant material such as berries, seeds and grasses.	heather moors, blanket bogs & acidic grasslands.	throughout winter, both coastal and inland.	<ul style="list-style-type: none"> Peak annual counts of n=1 between 1994/95 and 2010/11; winter counts. Sites of relevance: unknown.	Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The species occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. Significant disturbance due to hand harvesting is also highly unlikely, given the low number of boats and people involved. Breeding occurs inland and will be unaffected by harvesting. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
52	Grey Wagtail <i>(Motacilla cinerea)</i>	Widespread resident along fast flowing streams and rivers in Ireland.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Insects caught on the ground or in flight.	Along streams and rivers, frequently building its nest under a bridge.	Generally sedentary. Some birds move to coastal areas, where storm cast seaweeds may be present.	General distribution: Reported as present. Sites of relevance: Occurs mainly inland.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs largely inland. There is no significant risk of harvest activities impacting on feeding source or habitat; they are not reliant on <i>A. nodosum</i> for dietary requirements or habitat type. Storm cast algae will not be	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								harvested. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
53	Hen Harrier (<i>Circus cyaneus</i>)	Breeds in uplands and bogs of Ireland.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Small birds and mammals.	Breeding birds confined mainly to heather moorland and young forestry plantations, where they nest on the ground.	Coastal and lowland areas.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs largely inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
54	Herring Gull (<i>Larus argentatus</i>)	Resident all year round, along coast and inland.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Predator and scavenger. Feeds on the coast, near fishing boats and landfill sites.	April-July: Breeds around the coast of Ireland and inland in some counties.	Widespread on Irish coast and inland.	General distribution: <ul style="list-style-type: none"> Peak annual counts ranging from n=5 to n=80 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> Kilmackilloge harbour. Ardgroom Harbour. Kenmare Estuary. Bridaun Island (SMP, 2010). Eyries Island (SMP, 2010). Derrynane Bay (Iveragh Peninsula SPA, 004154). Iveragh Peninsula SPA (NPWS, 2015B; NPWS, 2015F). Deenish and Scariff Island SPA (NPWS 2015E). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The Herring Gull population occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. While the species is territorial when defending their young, they typically nest in elevated areas. Storm cast algae will not be harvested. There is no significant risk of harvest	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
55	Hooded Crow (<i>Corvus cornix</i>)	Common resident throughout Ireland.	Green conservation status in Ireland.	Omnivorous: seeds, insects, carrion, young birds and eggs, crabs and molluscs.	Widespread and common breeding species throughout Ireland.	Largely sedentary within territories they occupy.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The species occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
56	House Martin (<i>Delichon urbicum</i>)	Common summer visitor in Ireland from mid-March to late-September.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Insects such as aphids and mayflies.	Constructs a nest out of mud, usually beneath eaves of houses. Also nests on cliffs.	Tropical Africa.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
57	House Sparrow	Resident.	Amber	Seeds, split grain,	Around farm	Undertakes	General distribution: Reported	Feeding source: no impact.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> [†]	Mitigation measures [‡]
	<i>(Passer domesticus)</i>		conservation status in Ireland. (BoCCI4, 2020-2026)	buds and insects.	buildings and built-up areas. Nests in cavity in buildings, under eaves or holes, etc. Will use nestboxes.	only minor movements during the year.	as present. Sites of relevance: unknown.	Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
58	Iceland Gull <i>(Larus glaucooides)</i>	Occurs in winter.	Green conservation status in Ireland.	Omnivore. Scavenges at harbours and rubbish tips.	Greenland and eastern Arctic Canada	Along the coast of north-eastern North America and Western Europe	General distribution: • Peak annual counts of n=1 between 1994/95 and 2010/11; winter counts. Sites of relevance: • Kenmare Estuary.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The species occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
59	Jay (<i>Garrulus glandarius</i>)	Local resident in broadleaf woodland	Green conservation status in Ireland.	Omnivorous, consumes seeds, insects, young birds, eggs, nuts.	Mainly in deciduous woodland.	Resident in their territory throughout the year.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: unknown	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. There is no risk of human disturbance as this species is located inland. There is no	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
60	Kingfisher <i>(Alcedo atthis)</i>	Resident (streams, rivers and canals)	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Small fish and aquatic insects.	Breed in tunnels dug in banks along streams and rivers.	Sedentary species, rarely moving from their territories. May occasionally move to lakes and coasts during extended periods of bad weather.	General distribution: <ul style="list-style-type: none"> Peak annual counts of n=1 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> Kenmare Estuary. Dromquinna Manor (McAvoy, 2012). Coornagillagh (Moore, F, Lehid Harbour, Tuosist (Moore F, 2012-2013). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The species occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
61	Lapwing (<i>Vanellus vanellus</i>)	Residents and migrants. Greatest numbers between September & April.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Usually feed during the day on soil and surface invertebrates, e.g. small arthropods and earthworms.	Breed on open farmland.	Widespread distribution in winter on major wetlands, pasture and rough land close to bogs.	General distribution: <ul style="list-style-type: none"> Peak annual counts ranging from n=4 to n=17 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> Coulagh Bay (Heardman 2007). Kenmare Estuary. 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely given: (a) the low number of boats and people involved and (b) the species is mainly distributed inland away from the intertidal <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source or habitat. This	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
62	Lesser black-backed Gull (<i>Larus fuscus</i>)	Summer (Mar-Sept)	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Fish, fisheries waste, landfill rubbish, insects, young birds.	On the ground (offshore & inland islands, sand dunes, coastal cliffs).	Inland and along the south and east coasts of Ireland.	General distribution: <ul style="list-style-type: none"> Peak counts of n=1 per annum between 1994-2011; winter counts. Sites of relevance: <ul style="list-style-type: none"> Kenmare Estuary. Bridaun Island (SMP, 2010). Eyeries Island (SMP, 2010). Deenish and Scariff Island SPA (NPWS 2015E). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. This species is well adapted to human presence and significant impacts due to human disturbance are highly unlikely. Storm cast algae will not be harvested. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
63	Little egret (<i>Egretta garzetta</i>)	Resident along coasts and rivers	Green conservation status in Ireland.	Forages in wetland habitats, lakes and flooded grassland. Diet includes small fish, frogs, snails and insects.	Breeds in lakes, marshes, flooded fields & estuaries.	Wetland habitats, shallow lakes, riverbanks, lagoons, coastal estuaries and rocky shoreline.	General distribution: <ul style="list-style-type: none"> Peak annual counts of n=1 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> Ardgroom Harbour (Heardman 2007). 2m Island (Walsh D, 2013). Kenmare Estuary. 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The species occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
64	Little Grebe (<i>Tachybaptus ruficollis</i>)	Resident on ponds and lakes	Green conservation status in Ireland (Long Term Trend: stable or increasing)	Invertebrates (e.g. insect larvae), molluscs and small fish.	Northeast of Ireland. shallow, freshwater rivers, streams, loughs and ponds	Ephemeral wetlands, sheltered coasts, estuaries, coastal lakes and lagoons	General distribution: <ul style="list-style-type: none"> Peak annual counts ranging from n=1 to n=9 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> Kilmackilloge harbour. Kenmare Estuary. Ardgroom Harbour (Heardman 2007). Lehid Harbour, Tuosist (Moore F, 2012-2013). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. This species is potentially vulnerable to human disturbance in the form of recreational water sports (Holden and Housden, 2016, pg. 55). Significant disturbance effects due to hand harvesting are highly unlikely as the species occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
65	Little Gull (<i>Larus minutus</i>)	Winter visitor to east and south coasts from October to March and scarce	Amber conservation status in Ireland. (BoCCI4, 2020-)	Feeds by picking small fish, crabs and other invertebrates off the surface of the sea and less	Does not breed in Ireland.	Winter along the coasts of the North and Irish Seas, and the Mediterranean	General distribution: Reported as present. Sites of relevance: Reported as present at Lehid Harbour, Tuosist (Moore F, 2012-2013).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
		passage migrant in spring and autumn.	2026)	frequently, lakes and ponds.		n.		unlikely, as the species is not reliant on the <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source or habitat. Dietary requirements are varied and will not be affected by harvesting activities. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
66	Little Plover <i>(Charadrius dubius)</i>	Localized summer visitor.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Insects, spiders, beetles, flies, larvae of mayflies, dragon flies, freshwater shrimps, worms, water snails and seeds (Holden & Housden, 2016).	Nests on bare ground or among low vegetation.	Africa.	General distribution: Reported as occurring in winter along outer reached of the bay. Sites of relevance: Recorded at Dursey Island.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species is distributed inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
67	Little Stint (<i>Calidris minuta</i>)	Scarce passage migrant while on passage from northern Scandinavia and Russia between August & October	Green conservation status in Ireland	Feeds on invertebrates found in estuarine and mudflats (BirdLife International, 2016D). Often found feeding with Dunlin (Anon, 2016A).	Does not breed in Ireland.	August & October.	General distribution: Not reported as being present. Sites of relevance: n/a.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. There is no significant risk of harvest activities impacting on feeding source or habitat. The species occurs intermittently in Cork and Kerry and in small numbers, thus reducing the likelihood of interactions with hand harvesters. This species is not reliant on <i>A. nodosum</i> for	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures†
								feeding requirements or habitat type.	
68	Little Tern <i>(Sterna albifrons)</i>	Summer (April-Aug)	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Mainly marine fish	Apr-Aug: Nest colonially on the ground on shingle beaches and inland.	Western Africa	General distribution: <ul style="list-style-type: none"> Approx 2 pairs occasionally breed (1995, ref: NPWS 2013C). Sites of relevance <ul style="list-style-type: none"> Rocky islands in Derrynane Bay (Iveragh Peninsula SPA, 004154). Eyeries Island (NPWS 2013C). Spanish Island (NPWS 2013C). Brennel Island (NPWS 2013C). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Human disturbance, primarily due to dog walkers and vehicles, are a potential threat (Holden and Housden, 2016, pg. 132). Human disturbance at coastal and inland nesting sites can also lead to nest failures (BirdLife International, 2016A, Barcena <i>et al.</i> 1984, del Hoyo <i>et al.</i> 1996). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species generally occurs outside the intertidal <i>A. nodosum</i> zone (e.g. shingle beaches and inland). There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	<ul style="list-style-type: none"> No harvest during breeding season (Apr- Aug) at sites of relevance. Beaches will be avoided all year round. Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark. Avoid approaching, chasing, scaring or putting birds to flight at any time.
69	Long eared owl (<i>Asio otus</i>)	Widespread resident throughout Ireland.	Green conservation status in Ireland	Hunts small mammals, frogs and birds.	Breeds in lowlands throughout Ireland, usually in a stand of conifers.	Resident throughout Ireland.	General distribution: Reported as present (Balmer <i>et al.</i> , 2013). Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs largely inland. There is no significant risk of harvest activities	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
70	Mallard <i>(Anas platyrhynchos)</i>	Resident and winter migrant from Europe.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Variable diet including plant material, seeds, molluscs crustaceans, grain stubble, food presented by humans.	Nest on ground.	Widespread, occurring in almost all available wetland habitats in Ireland.	General distribution: <ul style="list-style-type: none"> Peak annual counts ranging from n=12 to n=71 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> Kenmare Estuary. Roughy River Estuary pNHA (NPWS 2009F). Illlaunleagh (Walsh D, 2013). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. While potentially vulnerable to disturbance by people and boats, significant disturbance due to hand harvesting is highly unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
71	Manx Shearwater <i>(Puffinus puffinus)</i>	Summer visitor between March to August.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Taken by diving (Small fish, plankton, molluscs and crustaceans).	Only comes to land in the breeding season. Nests by creating burrows or using crevices on seacliffs or remote island areas containing or soft earth	Winters at sea (South Atlantic off South America).	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: <ul style="list-style-type: none"> Deenish Island and Scariff Island SPA (site code:004175, NPWS, 2015E). Beara Peninsula SPA [004155]. 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Manx Shearwater is vulnerable to mammalian and avian predators. They are also vulnerable to human disturbance at nesting sites. If disturbed they may leave the nest. Significant disturbance due to hand harvesting is	<ul style="list-style-type: none"> Harvesting will not take place at Deenish Island and Scariff Island SPA (site code: 004175). No harvesting at Beara Peninsula SPA [004155]. No harvesting at Sheep's Head to Toe Head SPA [004156]. Harvesters must stay clear of sea cliffs or burrow-like

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures†
					and grass (Brook, 2013).		<ul style="list-style-type: none"> • Sheep's Head to Toe Head SPA [004156]. 	<p>unlikely, given (a) the low number of boats and people involved and (b) the species typically utilizes non-<i>A. nodosum</i> habitats.</p> <p>There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	habitats which occur inland in areas beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.
72	Meadow Pipit <i>(Anthus pratensis)</i>	Common in Ireland, mainly in rough pastures and uplands.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Invertebrates (e.g. crane flies, mayflies and spiders) and seeds.	Bogs, uplands and areas of scrub and pasture.	Generally sedentary.	<p>General distribution: Reported as present.</p> <p>Sites of relevance: Occurs inland.</p>	<p>Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact.</p> <p>Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	Mitigation not required.
73	Mediterranean Gull <i>(Larus melanocephalus)</i>	Breeds in small numbers in the south-east, with winter visitors from September to April.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Terrestrial and aquatic insects, marine molluscs and fish.	Breeds in small numbers near the coast in the south east. Nests on ground in sparsely vegetated sites, thickets or reedbeds (BirdLife International, 2016C).	Favours estuaries, harbours, saline lagoons (BirdLife International, 2016C). It can occur in low numbers in Cork and Kerry in	<p>General distribution: reported as present.</p> <p>Sites of relevance:</p> <ul style="list-style-type: none"> • Lehid Harbour, Tuosist (Moore F, 2012-2013). 	<p>Feeding source: no impact. Habitat loss: no impact. Human disturbance: This species is most vulnerable to disturbance by tourists at breeding colonies (BirdLife International, 2016C and references therein). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the</p>	<ul style="list-style-type: none"> • Harvesters must avoid thickets, reed beds and other areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark. • Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughy River, River

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
						winter months.		<p>species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur.</p> <p>There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	<p>Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug.</p> <ul style="list-style-type: none"> • Avoid approaching, chasing, scaring or putting birds to flight at any time.
74	Merlin (<i>Falco columbarius</i>)	Local summer visitor to uplands. Winter visitor at lowland sites (October to April).	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Small birds (e.g. Meadow Pipits and Skylarks).	Rare in Ireland. Nests on ground (moorland, mountain, blanket bog).	Widely distributed in the winter (inland and coastal).	<p>General distribution: Reported as present.</p> <p>Sites of relevance: unknown.</p>	<p>Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact.</p> <p>Disturbance is highly unlikely as the species is distributed in a wide range of areas outside the <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	Mitigation not required.
75	Moorhen (<i>Gallinula chloropus</i>)	Resident, augmented by winter visitors between September to April.	Green conservation status in Ireland	Omnivorous, feeds on water, muddy ground and in fields (insects, fruits, seeds, tadpoles and fish)	Nests near freshwater abundant with vegetation, including town canals, muddy ditches, and large lakes.	Winters close to its breeding areas, sometime in lower areas.	<p>General distribution: Reported as present (Balmer et al., 2013).</p> <p>Sites of relevance: unknown.</p>	<p>Feeding source: no impact Habitat loss: no impact. Human disturbance: no impact.</p> <p>Significant impacts due to human disturbance are highly unlikely as this species breeds and winters primarily inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This</p>	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
76	Mute Swan (<i>Eala bhalbh</i> ; <i>Cygnus olor</i>)	Wetlands throughout Ireland.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Water plants, land plants, snails, amphibians and insects.	Breeds on lakes, ponds & rivers. Nests constructed from aquatic material and seaweed along coasts.	Occurs both inland and on the Irish coast.	General distribution: <ul style="list-style-type: none"> Peak annual counts ranging from n=2 to n=5 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> Dinish Island. Roughy River Estuary pNHA (NPWS 2009F). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Impacts due to human disturbance are highly unlikely. The species occupies a wide range of inland & coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvesting will occur. As per the code of practice, harvesters must avoid areas beyond the intertidal, ensuring that interactions with nests are avoided. There is no risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
77	Northern Goshawk (<i>Accipiter gentilis</i>)	Mostly vagrant in Ireland.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Birds such as jays, wood pigeons, crows, pheasants, starlings and thrushes (Holden & Housden, 2016).	Nests built in trees.	Most birds do not move far from breeding sites.	General distribution: Reported as present. Sites of relevance: Recorded at Dursley Island.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
78	Oystercatcher <i>(Haematopus ostralegus)</i>	Resident all year round	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Larger invertebrates such mussels, cockles (sandy coasts) Grasslands (earthworms, tipulid larvae). Feed by sight (polychaetes) and touch (bivalve mussels).	Beaches, dunes, salt marshes and rocky shores	Mainly open sandy coasts but may utilize estuaries in winter (Holden and Housden, 2016, pg. 89).	General distribution: <ul style="list-style-type: none"> Peak from n=14 to n=96 between 1994/95 & 2010/11; winter counts. Sites of relevance <ul style="list-style-type: none"> Dinish Island. Kenmare Estuary. Ardgroom Harbour (Heardman 2007). Roughy River Estuary pNHA (NPWS 2009F). Bridaun Beg (Walsh D, 2013) Derrynane Bay (Iveragh Peninsula SPA, 004154). Blue Islands, Allihies Bay, Beara SPA (Walsh D, 2013). Dronquinna Manor (McAvoy S, 2012). Lehid Harbour, Tuosist (Moore F, 2012-2013). Kilmackilloge Harbour (Moore F, 2012-2013). Oysterbed (Sweeney, 2015). Greenane (Mahony, 2017). Ballingloss (Lysaght, 2014-16). Kenmare Bay (Crushell, 2017). Killmakilloge Harbour (Moore, 2013). Ardgroom (Mahony, 2017). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Human presence may alter behaviour (Tjørve KMC & Tjørve E (2010). Disturbance may lead to flight events (Phalan B & Nairn RGW 2008). Human recreational activities may cause nest failure or lead to disturbance of roosting birds at high tide, thereby impact on energy conservation requirements (Holden and Housden, 2016, pg. 89). However, significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	<ul style="list-style-type: none"> No harvesting at Iveragh Peninsula SPA [004154]. No harvesting at Beara Peninsula SPA [004155]. Open sandy coasts, beaches, dunes and salt marsh areas will be avoided all year round. Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughy River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug. When approaching shore at high tide, move slowly and keep distance from groups of resting birds. Avoid approaching, chasing, scaring or putting roosting or feeding birds to flight at any time.
79	Peregrine (<i>Falco peregrinus</i>)	Widespread resident in Ireland.	Green conservation status	Mainly birds	Breeds on coastal and inland cliffs.	Moves away from breeding areas into coastal areas (mainly	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: <ul style="list-style-type: none"> Cloonee and Inchiquin Loughs, Uragh Wood SAC 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species is mainly present inland during the breeding	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
						estuaries) and even cities to hunt.	(NPWS 2016A). • Iveragh Peninsula SPA (NPWS, 2015F).	season. Significant disturbance due to hand harvesting is highly unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
80	Pochard (<i>Aythya ferina</i>)	Scarce summer visitor and widespread winter migrant.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Plant material, spores, vegetative parts of aquatic plants.	Nests on the ground among waterside vegetation.	Preference for large shallow eutrophic waters with vegetated marshes and swamps and slow flowing rivers (October & February).	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species is mainly distributed inland, outside the <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
81	Puffin (<i>Fratercula arctica</i>)	Summer visitor from March to September to sea stacks and cliffs, mainly along west coast of Ireland.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Fish and crustaceans	April and early August. Nests in colonies in burrows, or sometimes in boulder screes and in cracks in steep cliffs.	Winters far out at sea.	General distribution: Reported as present along outer reaches of the Bay (Balmer et al., 2013). Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species is found in areas outside the <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source or habitat. This	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
82	Purple Sandpiper <i>(Calidris maritima)</i>	Winter visitor, mainly between September to April.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Invertebrates amongst rocks and along wave exposed shorelines among storm cast algae. Also feeds on invertebrates washed ashore by tides (Holden & Housden, 2016).	Tundra habitat, mountains and rocky shores (Iceland and Scandinavia).	Coastal areas, exposed rocky shores, rocky beaches and harbours. Can associate with Turnstones.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant disturbance due to hand harvesting is highly unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. Varied distribution and diet, also occurring in exposed areas. Storm cast algae will not be harvested. There is no significant risk of harvest activities causing species disturbance, impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
83	Raven (<i>Corvus corax</i>)	Widespread resident throughout Ireland.	Green conservation status	Larvae, worms, invertebrates, berries, grain, small mammals and birds.	Large eyrie on a cliff or in the crown of a tree. Mainly upland areas.	Largely sedentary within their territories. May move to low land or coastal areas.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: <ul style="list-style-type: none">• Inishfarnard (Walsh D, 2013).• Deenish and Scariff Island SPA (NPWS 2015E).• Glanmore Bog SAC (NPWS, 2016B)	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance during breeding season is highly unlikely as the species nests inland. The species is largely sedentary and remain within their territory in winter, thus reducing likelihood	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures†
								of potential disturbance events due to harvest activities. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
84	Razorbill <i>(Alca torda)</i>	Resident and occurs inshore & inland during breeding season.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Fish and invertebrates mainly via by surface diving.	Nests on sea cliffs.	At sea.	General distribution: <ul style="list-style-type: none"> Reported as present in Kenmare (NPWS, 2013B & references therein). Sites of relevance: <ul style="list-style-type: none"> Iveragh Peninsula SPA (NPWS, 2015B; NPWS, 2015F). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species is mainly distributed on cliffs, outside the <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
85	Red breasted merganser <i>(Mergus serrator)</i>	Resident & winter migrant from Europe.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Fish such as roach, trout, salmon, eels and pike during breeding season. Fish such as cod, hake and plaice during wintering.	Nest on lakes and rivers throughout the west and north of Ireland.	Brackish and marine waters, estuaries, bays and lagoons and offshore.	General distribution: <ul style="list-style-type: none"> Peak annual counts ranging from n=1 to n=16 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> Dinish Island. Kenmare Estuary. Kilcatherine point to Doonagh (Heardman, 2007). Lehid Harbour, Tuosist (Moore F, 2012-2013). 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. While Red breasted merganser is sensitive to disturbance near the nesting sites, the species nests inland outside the intertidal zone. Disturbance events are also unlikely given (a) the low number of boats and people involved in hand harvesting and	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								(b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
86	Red Grouse (<i>Lagopus lagopus</i>)	Resident all year round.	Red conservation status in Ireland. (BoCCI4, 2020-2026) Localised and declining resident on bogs and upland sites.	Feeds on heather, berries, insects and shoots and leaves of other plants.	Nests on ground.	Resident and sedentary (non-migratory).	General distribution: Reported as present. Sites of relevance: Occurs inland.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
87	Red Knot (<i>Calidris canutus</i>)	Winter visitor mainly between October & February.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Bivalve mussels and crustaceans, <i>Macoma balthica</i> , <i>Hydrobia ulvae</i> , <i>Mytilus edulis</i> and <i>Cerastoderma edule</i> .	Breed at low density, often near the coast. Nests on concealed and sparsely vegetated gravel, rocky slopes.	Coastal areas, mainly estuarine sites with extensive areas of muddy sand.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Species can be vulnerable to human disturbance (Holden and Housden, 2016, pg. 100). However, significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone	• Estuarine areas will be avoided during winter (Sept-April) at the mouths of Roughty River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures†
								<p>where harvest activities will occur.</p> <p>There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	
88	Redshank <i>(Tringa totanus)</i>	Resident and winter migrant from Iceland and other areas.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Feeds on <i>Hydrobia</i> sp., <i>Corophium</i> sp. and nereid worms on upper shore of estuaries and muddy river channels.	Nest inland on wet, marshy areas or heather.	Coast including mudflats, large estuaries and inlets.	<p>General distribution:</p> <ul style="list-style-type: none"> • Peak annual counts ranging from n=9 to n=80 between 1994/95 and 2010/11; winter counts. <p>Sites of relevance:</p> <ul style="list-style-type: none"> • Kenmare Estuary. • Derrynane Bay (Iveragh Peninsula SPA, 004154) • Roughty River Estuary pNHA (NPWS 2009F). • Illaunleagh (Walsh D, 2013). • 2m Island (Walsh D, 2013). • Lehid Harbour, Tuosist (Moore F (2012-2013). • Pallas Strand, Eyeries (Moore F (2012-2013). • Beara Peninsula SPA [004155]. 	<p>Feeding source: no impact. Habitat loss: no impact. Human disturbance: Human disturbance during the breeding season is unlikely to occur due to harvesting, as the species nests inland. If disturbed, Redshank may stop feeding and potentially fly away (Fitzpatrick S <i>et al.</i>, 1998). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur.</p> <p>There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	<ul style="list-style-type: none"> • No harvesting at Iveragh Peninsula SPA [004154]. • No harvesting at Beara Peninsula SPA [004155]. • Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughty River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug. • Avoid approaching, chasing, scaring or putting birds to flight at any time.
89	Red-throated Diver <i>(Gavia stellata)</i>	Winter visitor to all Irish	Amber conservation	Small fish, fish spawn, frogs,	Very few pairs breed in Ireland	September to April. Typically	General distribution: Reported as present (Walsh D, 2013).	<p>Feeding source: no impact. Habitat loss: no impact.</p>	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures†
		coasts	status in Ireland. (BoCCI4, 2020-2026)	shrimps, molluscs, insects and annelids.	(northwest only). Breed on small fresh water loughs. Nests located close to water's edge.	associated with shallow sandy bays.	Sites of relevance: • Bridaun Beg (Walsh D, 2013).	Human disturbance: no impact. Human disturbance during the breeding season is highly unlikely as the species nests inland. While potentially vulnerable to disturbance by people and boats, disturbance in winter due to hand harvesting is highly unlikely given (a) the low number of boats and people involved and (b) the species typically occupies shallow sandy bays which will not be subject to harvesting. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
90	Redwing (<i>Turdus iliacus</i>)	Widespread winter visitor to Ireland from October to March.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Worms, invertebrates, berries (Rowan, Hawthorn).	Does not breed in Ireland.	Common winter visitor to Ireland between October and early-April, favouring open fields in lowland areas, avoiding urban areas.	General distribution: Reported as present. Sites of relevance: Occurs inland.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
91	Ring Ouzel (<i>Turdus</i>	Rare summer	Red	Insects,	Scree slopes in	Thought to	General distribution: Reported	Feeding source: no impact.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
	<i>torquatus</i>)	visitor (from mid-March to Sept) to uplands (mainly Co. Donegal and Co. Kerry).	conservation status in Ireland. (BoCCI4, 2020-2026)	earthworms, berries and other fruit such as apples.	mountainous terrain with limited vegetation.	be southern Iberia and North Africa.	as present. Sites of relevance: Occurs inland.	Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
92	Ring-billed Gull <i>(Larus delawarensis)</i>	Scarce winter visitor to all Irish coasts	Amber-conservation status	Varied: crustaceans, fish, starfish, also scavenges at rubbish tips.	Rarely breeds in Ireland.	Sept-April: A rare winter to Ireland visitor with ~ 10 to 15 individuals noted annually.	General distribution: Not reported as being present. Sites of relevance: n/a.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Considered relatively tolerant to humans. Disturbance events are highly unlikely given the low number of boats and people involved. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
93	Ringed Plover <i>(Charadrius hiaticula)</i>	Resident all year round	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Invertebrates (polychaetes % crustaceans).	Nest on exposed wide sandy or shingle beaches.	Numbers increase in winter due to migrations from other regions (e.g. Scandinavia)	General distribution: • Peak counts of n=8 to n=14 between 1994 and 2011; winter counts. Sites of relevance: • Ardroom Harbour (Heardman 2007) • Derrynane Bay (Iveragh Peninsula SPA, 004154) • Pallas Strand (Moore, 2013).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Human presence may affect breeding pairs (ref: Liley, D. & W.J. Sutherland, 2007). The presence of tourists, dog walkers and other human recreational activities, have potential to disturb nest sites	<ul style="list-style-type: none"> • No harvesting at Iveragh Peninsula SPA [004154]. • No harvesting at Beara Peninsula SPA [004155]. • Exposed sandy beach areas will be avoided all year round.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
							<ul style="list-style-type: none"> • Derrynane (Mahony, 2017). • Pallas Strand (Moore, 2013). • Kenmare Sounds (Moore, 2012). • Lehid Harbour (Moore, 2013). • Kenmare Estuary. • Beara Peninsula SPA [004155]. 	<p>(Holden and Housden, 2016, pg. 91). However, significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur.</p> <p>There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	
94	Rock Pipit <i>(Anthus petrosus)</i>	Widespread resident along rocky coasts.	Green conservation status	Feeds mainly on invertebrates caught amongst seaweed or along the shoreline.	Breeds along rocky shores, sea cliffs and harbours.	Generally sedentary.	<p>General distribution: Reported as present (Balmer et al., 2013). Widespread distribution.</p> <p>Sites of relevance:</p> <ul style="list-style-type: none"> • Deenish Island and Scariff Island SPA (site code:004175). • Kenmare (Moore, 2017). • Ardea West, Tuosist (Moore, 2012) • Lehid Harbour, Tuosist (Moore, 2012). • Killmakillogue Harbour (Moore, 2013). • Pallas Strand (Moore, 2013). 	<p>Feeding source: Rock pipit prey is broad and includes: flies, midges (and their larvae), beetles, fish, small shellfish and seeds (Holden P and Housen S., 2016). It may also feed on periwinkles.</p> <p>Habitat loss: no impact.</p> <p>Human disturbance: during breeding season, Rock pipit are potentially vulnerable to disturbance by holiday makers (Holden P and Housen S., 2016). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone</p>	<ul style="list-style-type: none"> • As a general policy, hand harvesters will avoid sites where tourism, sport and recreation activities are observed to be taking place. • Harvesters must leave between 8-12 inches of the crop behind. This approach avoids: (a) extensive removal of canopy coverage, (b) avoids interactions with or by-catch of dormant or resting periwinkles positioned at the base of the canopy and (c) ensures that on development into free-

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								where harvest activities will occur. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	<p>living forms, <i>L. littorea</i> species are able to settle and establish within the intact canopy.</p> <ul style="list-style-type: none"> • <i>L. obtusata</i> eggs: Harvesters must work to avoid <i>A. nodosum</i> plants which contain visible <i>L. obtusata</i> egg masses. This is important to prevent harvest of viable eggs, thereby promoting maintenance of population size.
95	Roseate Tern <i>(Sterna dougallii)</i>	Rare summer visitor	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Mainly marine fish.	April-Oct: Colonial nesting on the ground, close to shore on sand-dunes, sand-spits, shingle beaches, reefs saltmarshes and rocky, sandy or coral islands (BirdLife International (2016G and references therein).	West Africa.	General distribution: Not reported as being present. Sites of relevance: n/a.	<p>Feeding source: no impact. Habitat loss: no impact. Human disturbance: Human presence may lead to trampling of nests. Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur.</p> <p>There is no significant risk of harvest activities impacting on food source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	<ul style="list-style-type: none"> • Harvesters must avoid areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark. • Avoid approaching, chasing, scaring or putting birds to flight at any time.
96	Sand Martin (<i>Riparia riparia</i>)	Widespread summer visitor in	Amber conservation status in	Insects caught in flight.	Burrows dug into river banks or quarries.	Sub-Saharan Africa.	General distribution: Reported as present. Sites of relevance: unknown.	<p>Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact.</p>	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
		Ireland from mid-March to September.	Ireland. (BoCCI4, 2020-2026)					Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
97	Sanderling (<i>Calidris alba</i>)	Winter visitor	Green conservation status	Small invertebrates along the tidal edge (sandy coastlines) including polychaete worms and shrimp-like crustaceans.	Arctic tundra	Along sandy coastlines, especially non-estuarine.	General distribution: Reported to occur in outer reaches of the bay Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant disturbance due to hand harvesting is highly unlikely, given (a) the low number of boats and people involved and (b) the species typically utilizes non- <i>A. nodosum</i> habitats such as sandy coastline areas. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
98	Sandwich Tern (<i>Sterna sandvicensis</i>)	Summer (Mar-Sept)	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Mainly Surface dwelling fish	Mar-Sept: Nests on the ground (coast & inland).	Mainly southern Europe and Africa	General distribution: • Approx 2 pairs occasionally breed (1995, NPWS 2013C). Sites of relevance • Rocky islands in Derrynane Bay (Iveragh Peninsula SPA, 004154) • Eyeries Island (NPWS 2013C).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Vulnerable to human disturbance (e.g. tourists) near breeding colonies on beaches early in the breeding season (BirdLife International 2016B, Bourne	<ul style="list-style-type: none"> • No harvesting at Iveragh Peninsula SPA [004154]. • No harvest during breeding season (Mar- Sept) at sites of relevance. • Beaches will be avoided all year round. • Harvesters must avoid

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
							<ul style="list-style-type: none"> Spanish Island (NPWS 2013C). Brennel Island (NPWS 2013C). Coornagillagh (Moore F, 2012-2013). Derrynane National Historic Park (Bourke and O'Sullivan, 2014). 	<p>and Smith 1974, del Hoyo et al. 1996). There is potential that colonies subjected to human disturbance may abandon such sites (Holden and Housden, 2016, pg. 133). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species generally occurs outside the intertidal <i>A. nodosum</i> zone.</p> <p>There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.</p>	<p>areas of coast beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.</p> <ul style="list-style-type: none"> Avoid approaching, chasing, scaring or putting birds to flight at any time.
99	Scaup (<i>Anas marila</i>)	Winter visitor from Iceland.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Animal matter, mainly crustaceans and molluscs.	Does not breed in Ireland	Nov-April: estuaries and bays, brackish lagoons, shallow marine waters (<than 10m deep).	<p>General distribution:</p> <ul style="list-style-type: none"> Peak season count of N=7 (1984/85-86/87, NPWS 2009F). <p>Sites of relevance:</p> <ul style="list-style-type: none"> Roughy River Estuary pNHA (NPWS 2009F). 	<p>Feeding source: no impact. Habitat loss: no impact. Human disturbance: Scaup are susceptible to disturbance by human presence. Recreational activities may reduce the amount of available wintering habitats, particularly daytime roosts (Jensen <i>et al.</i>, 2009). While potentially vulnerable to disturbance by people and boats, significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A.</i></p>	<ul style="list-style-type: none"> Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughy River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug. When approaching shore at high tide, move slowly and keep distance from groups of resting birds. Avoid approaching, chasing, scaring or putting

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								<i>nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	roosting or feeding birds to flight at any time.
100	Shelduck (<i>Tadorna tadorna</i>)	Resident and winter during the winter from Scandinavia and the Baltic	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Feeding mainly during the day on <i>Hydrobia ulvae</i> which is present in estuaries.	Along seashores, larger lakes and rivers.	Sheltered estuaries, tidal mudflats.	General distribution: <ul style="list-style-type: none"> Peak annual counts of n=4 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> Kenmare Estuary. 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: The development of ports, marinas, harbours and recreational pressures are considered as having potential to impact on Shelduck (Holden and Housden, 2016, pg. 26). The species is also sensitive to human disturbance when feeding (Martin, 1973, Hockin D <i>et al.</i> , 1992 and references therein). While potentially vulnerable to disturbance by people and boats, significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species generally occurs outside the <i>A. nodosum</i> zone. There is no significant risk of harvest activities impacting on feeding source (mainly <i>Hydrobia ulvae</i> in estuaries) or habitat. This species is not	<ul style="list-style-type: none"> Estuarine areas containing soft mud or marsh will be avoided during winter (Sept-April) at the mouths of Roughty River, River Sneem, River Sheen, River Blackwater and River Finnihy, Kenmare Estuary. Ensure caution if in the vicinity of these areas between May-Aug.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
101	Short-eared Owl <i>(Asio flammeus)</i>	Scarce winter visitor in Ireland and rare breeding species (mainly in south and east). Prefers uplands and coastal lowlands.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Small mammals, frogs and birds.	Rare and sporadic breeding species in uplands in Ireland.	Coastal lowlands (dunes, scrubby fields, machair).	General distribution: Reported as present. Sites of relevance: Recorded at Dursey Island.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs largely inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
102	Shoveller <i>(Anas clypeata)</i>	Resident & winter migrant, mainly between October and March.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Zooplankton on ephemeral wetlands (e.g. turloughs and callows), molluscs, insects, larvae, seeds and plant material.	Nests on the ground.	Coastal estuaries, lagoons and inland lakes and callows.	General distribution: • Peak annual counts of n=12 between 1994/95 and 2010/11; winter counts. Sites of relevance: • Kenmare Estuary.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The species nests inland thus reducing likelihood of interactions during the breeding season. The species occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat	No mitigation.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
103	Skylark <i>(Alauda arvensis)</i>	Resident all year round.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Variety of insects, seeds and plant leaves.	Variety of habitats (e.g. cultivated areas, grasslands, heaths.	Moves to stubble fields, grasslands and coastal areas.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: <ul style="list-style-type: none"> Deenish Island and Scariff Island SPA (site code:004175, (NPWS, 2015E). 	type. Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The species nests inland thus reducing likelihood of interactions during the breeding season. The species occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	No mitigation.
104	Smew (<i>Mergellus albellus</i>)	A rare winter visitor to wetlands from October to March.	Amber conservation status in Ireland.	Dives for small fish such as minnows, plaice and sandeels.	Does not breed in Ireland.	Rare winter visitor to ponds and lakes in Ireland, mainly the north and north-east.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
105	Snipe	Mainly in	Red	Vegetable matter,	Nests on the	Widespread	General distribution: <ul style="list-style-type: none"> Peak annual counts ranging 	Feeding source: no impact.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
	(<i>Gallinago gallinago</i>)	winter.	conservation status in Ireland. (BoCCI4, 2020-2026)	seeds and soil invertebrate fauna such as earthworms and tipulid larvae.	ground near wet, boggy terrain.	distribution on wetland and damp habitats, mainly on fringes of lowland lakes.	from n=1 to n=5 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> • Ardgroom Harbour (Heardman 2007). • Inishfarnard (Walsh D, 2013). • Glanmore Bog SAC (NPWS, 2016B). • Kenmare Estuary. 	Habitat loss: no impact. Human disturbance: no impact. Disturbance due to harvesting is highly unlikely, as the species is mainly distributed inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
106	Sparrowhawk (<i>Accipiter nisus</i>)	Common resident, with occasional winter visitors.	Green conservation status	Mainly small birds	Throughout Ireland in Wooded areas. Nests in trees.	Throughout Ireland	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species is mainly distributed inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
107	Spotted Flycatcher (<i>Muscicapa striata</i>)	Widespread summer visitor from May to September.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Insects caught in flight.	Broadleaf woodlands, well-vegetated hedgerows, parks and gardens.	Central and southern Africa.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								feeding requirements or habitat type.	
108	Stock Dove (<i>Columba oenas</i>)	Widespread resident in Ireland mainly in cereal cultivation areas.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Cereal grain, seeds, fruits of herbs, grasses and invertebrates.	Breeds in lowlands of eastern and southern Ireland. Nests in holes in trees.	Resident.	General distribution: Reported as present. Sites of relevance: Occurs mainly inland.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs largely inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
109	Stonechat (<i>Saxicola torquata</i>)	Widespread resident in scrubland areas throughout Ireland.	Green conservation status	Insects	Breeds in scrubby areas where gorse is present.	Mainly sedentary Stonechats but in autumn may move to lower altitudes.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: <ul style="list-style-type: none">• Deenish Island and Scariff Island SPA (site code:004175).• Glanmore Bog SAC (site code: 001879).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species is widely distributed, mainly inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	• Mitigation not required.
110	Storm Petrel (<i>Hydrobates pelagicus</i>)	Summer visitor to coasts from April to August.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Small fish, plankton, molluscs and crustaceans, taken from sea.	Breeds off the west coast in colonies on islands. Returns to nest after dark. Nests are concealed under vegetation, in	Winters at sea in the South Atlantic.	General distribution: <ul style="list-style-type: none">• Reported as present (NPWS 2015E). Sites of relevance: <ul style="list-style-type: none">• Deenish Island and Scariff Island SPA (site code:004175, NPWS 2015E).• Beara Peninsula SPA	Feeding source: no impact. Habitat loss: no impact. Human disturbance: There is evidence that recreational human disturbance can affect the reproductive success of nesting storm petrel (Watson et al., 2014). Significant	• Harvesting will not take place at Deenish Island and Scariff Island SPA (site code: 004175). • No harvesting at Beara Peninsula SPA [004155]. • No harvesting at Sheep's Head to Toe Head SPA

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
					boulder fields, old buildings and walls. Storm petrel often utilizes existing burrows.		[004155]. • Sheep's Head to Toe Head SPA [004156].	disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species typically utilizes non- <i>A. nodosum</i> habitats. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	[004156]. • No harvesting at Three Castle Head to Mizen Head SAC (Site Code: 000109). • Harvesters must stay clear of sea cliffs or burrow-like habitats which occur inland in areas beyond the intertidal zone, thus avoiding contact with nests on ground areas beyond the high tide mark.
111	Teal <i>(Anas crecca)</i>	Resident & winter migrant from Iceland.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Small seeds, green algae (<i>Enteromorpha sp.</i>), chironomid (midges).	Nest away from the coast near freshwater lakes, pools and streams.	Found in coastal lagoons, estuaries wetlands, inland marshes, lakes & ponds.	General distribution: • Peak annual counts ranging from n=9 to n=77 between 1994/95 and 2010/11; winter counts. Sites of relevance: • Dinish Island. • Kenmare Estuary. • Roughy River Estuary pNHA (NPWS 2009F).	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely. The Teal population occupies a broad range of inland and coastal habitats and is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. In addition, human disturbance is highly unlikely during breeding season as the species nests inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
112	Tufted Duck (<i>Aythya fuligula</i>)	Resident & winter visitor.	Amber conservation	Feed on mussels, crustaceans,	Preference for lowland areas	Lowland freshwater	General distribution: Not reported as being present.	Feeding source: no impact. Habitat loss: no impact.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures†
			status in Ireland. (BoCCI4, 2020-2026)	insect larvae and bryozoans.	with large open lakes.	lakes.	Sites of relevance: n/a.	Human disturbance: no impact. Significant impacts due to human disturbance are highly unlikely as this species breeds and winters primarily inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
113	Turnstone <i>(Arenaria interpres)</i>	Occurs late July to late April	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Marine invertebrates, Sandhoppers, fish carrion.	Scandinavia	All around the Irish coast including rocky shores, headlands, islands and piers	General distribution: <ul style="list-style-type: none"> Peak annual counts ranging from n=2 to n=9 between 1994/95 and 2010/11; winter counts. Sites of relevance: <ul style="list-style-type: none"> Ardgroom Harbour (Heardman 2007) Coulagh Bay (Heardman 2007). Bridaun Beg (Walsh D, 2013). 2m Island (Walsh D, 2013). Blue Islands, Allihies Bay, Beara Peninsula SPA, 004155 (Walsh D, 2013). Lehid Harbour, Tuosist (Moore F (2012-2013). Pallas Strand, Eyeries. Moore F (2012-2013). Ardea West, Tuosist (Moore, 2012). Killmakilloogue Harbour (Moore, 2013). Kenmare Estuary. 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: The species tends to be faithful to wintering sites and is sensitive to human disturbance when resting/ roosting at night and at high tide (Anon, 2016C). Significant disturbance due to hand harvesting is unlikely, given (a) the low number of boats and people involved and (b) the species is not limited to the intertidal <i>A. nodosum</i> zone where harvest activities will occur. Storm cast algae will not be harvested. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat	<ul style="list-style-type: none"> No harvesting at Beara Peninsula SPA [004155]. Avoid shores at dusk or night. When approaching shore at high tide, move slowly and keep distance from groups of resting birds. Avoid approaching, chasing, scaring or putting roosting or feeding birds to flight at any time.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								type.	
114	Twite (<i>Carduelis flavirostris</i>)	Declining breeding species mainly on the north and west coast. Scarce winter visitor to north-eastern coasts.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Seeds, split grain, buds and some insects.	Coastal bogs of Counties Mayo and Donegal.	Most remain close to breeding areas. May winter in coastal marshes and tilled fields.	General distribution: Reported as present. Sites of relevance: Occurs inland.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
115	Velvet Scoter (<i>Melanitta fusca</i>)	Rare winter visitor to coastal areas from October to March, occurs on inshore coastal waters.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Dives for shellfish and crustaceans.	Does not breed in Ireland.	Rare winter visitor to Irish coasts.	General distribution: Reported as present. Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Although Scoter forage in inshore waters, significant impacts due to human disturbance are highly unlikely given the low number of boats and people involved in hand harvesting. Significant impacts due to human disturbance are also unlikely, as the species is not reliant on the <i>A. nodosum</i> zone and is rarely found ashore during wintering. There is no significant risk of harvest activities impacting on feeding source or habitat. Dietary requirements will not be affected by harvesting activities. This species is not reliant on <i>A. nodosum</i> for	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
								feeding requirements or habitat type.	
116	Wheatear <i>(Oenanthe oenanthe)</i>	Widespread summer visitor from mid-March to early-October.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Insects and other invertebrates.	Breeds in a variety of habitats, e.g. along rocky coasts, pasture with stone walls and upland bogs.	Winters in southern Africa.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: <ul style="list-style-type: none"> Deenish Island and Scariff Island SPA (site code:004175) 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Impacts due to human disturbance are highly unlikely. They occupy a broad range of inland & coastal habitats and are not limited to the intertidal <i>A. nodosum</i> zone where harvesting will occur. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	<ul style="list-style-type: none"> Mitigation not required.
117	Whinchat <i>(Saxicola rubetra)</i>	Summer visitor from April to September to uplands and scrubland areas.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Insects and invertebrates.	Wide variety of habitats (insect-rich meadows and bracken-covered slopes in uplands).	Tropical Africa.	General distribution: Reported as present. Sites of relevance: Occurs inland.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
118	White Tailed Sea Eagle (<i>Haliaeetus albicilla</i>)	All year round in south west (Re-introduced to Killarney National Park in 2007).	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Carrion (dead sheep and seals), fish caught by dives. Occasionally Hares or seabirds from nesting sites.	Nest building in tress or coastal cliffs in Feb. Chicks leave nest in July - August. Eight pairs have nested and laid eggs with 5 hatching in Clare, Cork, Galway & Kerry.	Young eagles move to new areas at fledging.	New to Kenmare. <ul style="list-style-type: none"> One breeding pair confirmed in Beara Peninsula near Tuosist in 2015 (Johnson S, 2016). Clonee, Tuosist (Burns D, 2014). Derrynane (O'Connor D et al., 2012). Anecdotally, sea eagles are spotted throughout Kenmare during tourism cruises, etc. 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: Frequent human disturbance can cause breeding failures (Korsman, 2012 and refs. therein & The Golden Eagle Trust, 2015). Nests will not be encountered as harvest will not occur inland or at cliffs. This species is unlikely to be encountered by people in the <i>A. nodosum</i> zone. There is no risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	<ul style="list-style-type: none"> Harvesters must ensure the following between February to August: <ul style="list-style-type: none"> ➢ Keep distance from perched eagles. ➢ Avoid approaching, chasing, scaring or putting birds to flight at any time.
119	Whooper Swan (<i>Cygnus cygnus</i>)	Winter visitor to wetlands in Ireland from October to April.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Aquatic vegetation. Also grazes on agricultural grasslands and fields with spilled grain, and potatoes from cultivated land.	Occasional breeding records.	Lowland open farmland around inland wetlands.	General distribution: Reported as present (flying over) Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species mainly occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
120	Wigeon (<i>Anas Penelope</i>)	Winter (Sept-April)	Amber conservation status in Ireland.	Graze on seagrass and algae such as <i>Zostera</i> spp., <i>Enteromorpha</i> spp., grasslands	Breed on shallow freshwater marshes.	Inland wetlands, lakes, rivers and turloughs.	General distribution: <ul style="list-style-type: none"> Peak annual counts ranging from n=29 to n=126 between 1994/95 and 2010/11; winter counts; 	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. While potentially vulnerable to	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures‡
			(BoCCI4, 2020-2026)	and cereal crops.		Coastal marshes, freshwater and brackish lagoons, estuaries, bays.	n=80-175, 2014/15. Sites of relevance: <ul style="list-style-type: none">• Roughty River Estuary pNHA (NPWS 2009F).• Kenmare Estuary.	disturbance by people and boats, significant disturbance due to hand harvesting is highly unlikely, given the low number of boats and people involved. While feeding rates may be reduced by human disturbance (Hockin D, 1992, Cramp & Simmons, 1977), they occupy a broad range of inland and coastal habitats and are not limited to the intertidal <i>A. nodosum</i> zone where harvesting will occur. Measures are also in place to prevent disturbance to roosting bird species. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
121	Willow Warbler (<i>Phylloscopus trochilus</i>)	Visits between April to September.	Amber conservation status in Ireland. (BoCCI4, 2020-2026)	Feeds on insects and other invertebrates.	April-Sept. High densities in stands of willows along edges of marshes and bogs.	Does not winter in Ireland.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. There is no significant risk of harvest activities impacting on feeding source or habitat. Disturbance is highly unlikely as the species occurs largely inland. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
122	Wood Pigeon	Resident &	Green	Green leaves,	Utilizes	Numbers	General distribution: Reported	Feeding source: no impact.	Mitigation not required.

No.	Species	Presence in Ireland	Status in Ireland	Diet	Breeding	Wintering	Distribution & sites of relevance*	Potential hazards associated with harvesting <i>A. nodosum</i> †	Mitigation measures†
	<i>(Columba palumbus)</i>	winter visitor	conservation status	seeds, berries, buds, flowers and root crops.	woodlands, parks, gardens, heather and stunted bushes during breeding season.	increase in winter with immigrants from Britain & continent.	as present (Balmer et al., 2013). Sites of relevance: unknown.	Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs largely inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	
123	Woodcock (<i>Scolopax rusticola</i>)	Resident & winter visitor	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Feeds on earthworms, at night.	Nests on the ground in forests and woodland, amongst dead leaves and vegetation.	Winters in woodland areas, scrub and bracken and heather-covered hills.	General distribution: Reported as present (Balmer et al., 2013). Sites of relevance: unknown.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs largely inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.
124	Yellowhammer (<i>Emberiza citrinella</i>)	Declining resident mainly in east and south of Ireland.	Red conservation status in Ireland. (BoCCI4, 2020-2026)	Grasses, cereals and insects.	Restricted mainly to the east and south, strongly linked with cultivation of cereals.	Largely resident.	General distribution: Reported as present. Sites of relevance: Occurs inland.	Feeding source: no impact. Habitat loss: no impact. Human disturbance: no impact. Disturbance is highly unlikely as the species occurs inland. There is no significant risk of harvest activities impacting on feeding source or habitat. This species is not reliant on <i>A. nodosum</i> for feeding requirements or habitat type.	Mitigation not required.

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