

Revision of the Scottish Biodiversity List 2025: feedback from LINK



October 2025

Part 1: final Scottish Biodiversity List

General comments and next steps

The different approaches used for marine and terrestrial species and habitats have caused some confusion. There are two key aspects to this:

1. For future review: bringing the two approaches closer together would ensure that the SBL clearly is able to deliver its statutory purpose to support the conservation of biodiversity. Using Priority Marine Features, which while expedient, brought in concerns over how the SBL would be used in future. Ensuring future reviews adopt the same process for terrestrial and marine species and habitats and that all are considered together would ensure that coastal and mobile land / sea species do not fall through the net and that the SBL is used for its statutory purpose.
2. Presentation of the list: a single final list of species, terrestrial and marine together - plus terrestrial and marine habitats listed together, but drawn from different processes, is the best case scenario and makes it simpler for those who will need to use and refer to the list but who will not worry about which habitat classification scheme was used. Designing list presentation for the audience using it, rather than those who created it, is key.

The separate list for data deficient species to be presented on the same web page / portal and targeted for action is welcome. Some suggestions of species that should / should not be on that list are below..

We welcome the open and collegiate approach Naturescot has adopted in drawing up the revised SBL. While the timetable has been extremely tight, being able to pool all of LINK members expertise with Naturescot's and other key partners, has resulted in a list that genuinely has expert support. It has procured a robust list, in a remarkably short space of time.

We would be very happy to contribute to further discussion on how the list will be presented and published in due course. The SBL has a vital function and as a foundation of effective biodiversity conservation and restoration action, it must be easily accessible, easily and widely used. Having a clear list, with accessible, searchable evidence behind it will be key.

SBL species:

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At the workshop, we identified some species that in our view were missing that should be included and also some species where effective species action in Scotland is not evident and which would instead benefit from habitat/ecosystem restoration.

Species to add that need and will benefit from conservation action.

Birds:

- Woodcock
- Sandwich Tern
- Willow tit: Red Listed, having suffered the worst population decline of any British bird in recent times. In active conservation projects at Threave in D&G for example. Some of the causes of decline are known and can be acted upon.
- Merlin
- Whinchat
- Ring Ouzel
- Whimbrel

Justification can be provided if required.

Invertebrates

Odonata species:

- species put forward at and following the August workshop appear to be missing. They are either endangered or vulnerable at a European level under iucn criteria, in decline, on species at risk list, and at threat due to habitat loss and climate change. All have good data and we know what to do, with projects scoped to deliver.
- *Coenagrion hastulatum* (Endangered) should be included.

Some invertebrates were included in the list for survey survey / research but are not actually data deficient and should instead be on the SBL. These include: *Adicella filicornis*, *Donacia aquatica* and *Omphiscola glabra*, which is already in active conservation projects.

Vascular plants:

Saxifraga cernua (Vulnerable, Schedule 8), only occurs on Ben Lawers, at Glencoe and on hills in the Ben Nevis range. Hot summers can cause dessication and wilting of the bulbil-bearing stems, but intervention may be able to help in the short term with bulbils being given a helping hand by planting around existing plants and into locations where the plant has disappeared through stochastic events such as landslip.

Fish:

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Coregonus albula is Britain's rarest freshwater fish, and has been successfully translocated from Bassenthwaite to Loch Skeen in the Moffat Hills. Further translocations could safeguard the future of this species.

Marine mammals:

North Atlantic (Northern) right whale — *Eubalaena glacialis*

- **Proportional / national importance:** Historically present in NE Atlantic and recorded from the region; while numbers in the eastern Atlantic are extremely low due to population decimation from whaling including off Scotland (possibly functionally absent), any occurrence in Scottish waters is of very high national and international significance because this species is one of the world's most endangered large whales. Scotland therefore has very high proportional importance for any individuals or records. (i.e. Ryan, C., Calderan, S., Allison, C., Leaper, R., Risch, D., 2022. Historical occurrence of whales in Scottish Waters inferred from whaling records. Aquatic Conservation 32, 1675–1692. <https://doi.org/10.1002/aqc.3873>)
- **Decline / threat:** The species faces catastrophic risk from vessel strikes and entanglement off the eastern seaboard of N America; these threats are well documented as principal drivers of injury, mortality and impaired population recovery. Given global declines and extremely small eastern-Atlantic presence, the risk of loss is high. (i.e., Knowlton, A.R., Clark, J.S., Hamilton, P.K., Kraus, S.D., Pettis, H.M., Rolland, R.M., Schick, R.S., 2022. Fishing gear entanglement threatens recovery of critically endangered North Atlantic right whales. Conservation Science and Practice 4, e12736. <https://doi.org/10.1111/csp2.12736>)
- **Functional importance:** Large baleen whales play a critical role in the functioning and structure ecosystems through nutrient cycling (e.g., “whale pump”) and influence plankton/foodweb dynamics. Even rare occurrences have outsized conservation value (genetic, population connectivity). (See Scotland Marine Atlas for cetacean ecological roles; <https://www.gov.scot/publications/scotlands-marine-atlas-information-national-marine-plan/>)

Conclusion: Even if records are rare, the combination of global endangered status, extreme rarity in the eastern Atlantic, and severe anthropogenic threats justifies retaining right whales on the SBL under the PMF tests (if they are applied here).

True's beaked whale — *Mesoplodon mirus*

- **Proportional / national importance:** True's beaked whale has extremely few UK records, the first confirmed British record was a 2020 stranding in Sutherland, Scotland, making any Scottish record of disproportionate national importance. (Kitchener, A.C., Hantke, G., Herman, J.S., Ten Doeschate, M., Brownlow, A.C., 2020. First record of True's beaked whale, *Mesoplodon mirus*, in Britain. Mammal Com. 6. <https://doi.org/10.59922/XTSP6547>)
- **Decline / threat:** Beaked whales (including Cuvier's and other ziphiids) are strongly affected by anthropogenic acoustic disturbance (mid-/low-frequency naval sonar and seismic noise) which has been repeatedly associated with strandings. Given increasing naval, seismic and commercial activity, the threat environment is significant. (i.e., Simonis, A.E., Brownell, R.L., Thayre, B.J., Trickey, J.S., Oleson, E.M., Huntington, R., Baumann-Pickering, S., 2020. Co-

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occurrence of beaked whale strandings and naval sonar in the Mariana Islands, Western Pacific. Proc Biol Sci 287, 20200070. <https://doi.org/10.1098/rspb.2020.0070>)

- **Functional importance:** Beaked whales are deep-diving predators that link deep-sea trophic processes with surface ocean dynamics; they are also indicators of deep-sea ecosystem health because of their specialised foraging and sensitivity to disturbance.

Conclusion: The rarity of UK records (first confirmed British record in Scotland), lack of data on presence offshore, combined with strong, specific anthropogenic threats to beaked whales, supports maintaining *M. mirus* on the SBL.

False killer whale — *Pseudorca crassidens*

- **Proportional / national importance:** There are historic and contemporary records of false killer whales around UK/Scottish waters (records off west Scotland, Orkney etc.). For a species that is otherwise offshore and uncommon in UK shelf seas, Scottish records constitute notable national importance. (<https://www.marlin.ac.uk/species/detail/123>)
- **Decline / threat:** False killer whales are vulnerable to pollution (PCBs), bioaccumulation, and fishery interactions (bycatch/gear entanglement), and several populations elsewhere show concern for contaminant loads and reproductive impacts. These threats are relevant to their conservation in UK waters. (<https://www.seawatchfoundation.org.uk/wp-content/uploads/2020/07/False-Killer-Whale.pdf>)
- **Functional importance:** As large, long-lived predators that feed on large fish and squid, they occupy high trophic positions and can be indicators of offshore prey availability and ocean health.

Conclusion: Given their offshore rarity in UK waters, contaminant and bycatch threats, and ecological role, false killer whales meet the PMF tests and should remain listed.

Striped dolphin — *Stenella coeruleoalba*

- **Proportional / national importance:** Striped dolphins are generally more common in warmer temperate waters, but records around the UK (including an increase in sightings since the 1980s) and occasional occurrences in Scottish waters (usually summer) mean Scotland contributes to their northern distribution limit, a factor of national importance for range edge populations, especially in light of climate change and shifting distribution of species with sea temperature rises (<https://jncc.gov.uk/jncc-assets/Art17/S2034-UK-Habitats-Directive-Art17-2019.pdf>) Just last week there were two separate striped dolphin strandings in the Ardersier area in the Moray Firth.
- **Decline / threat:** Striped dolphins are exposed to contaminant loads, bycatch and are sensitive to changes in prey distribution driven by climate change; monitoring indicates changes in distribution that could be symptomatic of broader ecosystem change.
- **Functional importance:** As mid-water predators, striped dolphins influence schooling fish/squid dynamics and are useful indicators of shifting thermal/prey regimes at range margins.

Conclusion: Their role as a range-edge species for Scotland combined with threats from contaminants and shifting prey makes a case to retain them on the SBL.

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Cuvier's beaked whale – *Ziphius cavirostris*

- **Proportional / national importance:** Cuvier's beaked whale is the most frequently stranded/recorded beaked whale species in NE Atlantic and has established records in Scottish waters (including recent, clustered strandings across northern Europe that included Scotland). That prevalence in deep-offshore waters adjacent to Scotland gives the country national importance for the species. (<https://www.hwtdt.org/cuiviers-beaked-whale>)
- **Decline / threat:** Cuvier's and other beaked whales strandings have shown clear associations with sonar and seismic activities, and recent increases in strandings in northern Europe (2025 events) underline current, active threats from underwater noise, as well as bycatch, pollution and changing prey regimes.
- **Functional importance:** Deep-diving specialists, they are key predators in mesopelagic systems, and their sensitivity to acoustic disturbance makes them sentinel species for deep-sea noise impacts.

Conclusion: Regional records, clear and ongoing acoustic and other anthropogenic threats, and important ecosystem function support keeping *Ziphius cavirostris* on the SBL.

Species groups / assemblages:

It is not clear what 'rove beetle spp group' is: this should be 'Exposed Riverine Shingle invertebrates assemblage', which is what was discussed at the August workshop.

There are no spiders on the main list, although there were several listed at the August workshop and two assemblages highlighted - Caledonian Pine and Peatland.

The tooth fungi assemblage is very welcome. We wonder why we have both the assemblages and then a list of 13 tooth fungi listed separately on the list. We would recommend having the assemblage, making it clear that these 13 species are included in there.

Data deficient list:

Additions for the data deficient/research list should include some of the micro-moths that did not make the threshold (e.g. *Callisto coffeella*) and are likely score higher in a future assessment with more data/research.

Further information on invertebrate species currently listed on the data deficient list but which should be moved to the SBL list have been supplied separately in spreadsheet format.

Consider for Removal – species that will benefit from habitat/ecosystem restoration or for which potential for effective species action in Scotland is not evident.

Birds:

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- Bar-tailed Godwit
- Little Auk
- Northern Pintail
- Ruddy Turnstone
- Greater Scaup
- Common Goldeneye
- Sanderling
- Purple Sandpiper
- Great Northern Diver
- Eurasian Wigeon
- Velvet Scoter

Amphibians and reptiles:

Slow-worm and common lizard: the August workshops discussions agreed that they were not a priority.

Vascular plants:

Tofieldia pusilla and *Homogyne alpina*: unlikely to be a priority for action in the next few years, either because they are doing pretty well (*Tofieldia*) or were probably planted by Victorian plant enthusiasts (*Homogyne*).

Fungi:

See comment above about 13 tooth fungi species listed separately to the species assemblage.

Publication and presentation

We support the publication of a single list, not ranked, searchable – on website with data deficient list in same place. It should; be accompanied by context on how what it is for and how it will be used. By this we mean single lists for species (marine and habitats) and marine and species habitats plus data deficient lists.

We are also happy to help with proposed CPD training sessions for those who will be using the list. Concerns around the use of this list of priorities and exclude wider restoration and conservation actions remain, especially for funders who do not have the wider ecological context to draw from. However, with appropriate context and follow up through support from Naturescot and CPD sessions, this can be monitored and addressed if required.

Part 2: Terrestrial habitat list

Agreed habitats – with comments:

- Coastal dunes and sandy shores

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- Machair – checking EUNIS machair includes agricultural activity and crofting. Martin confirmed that agric would be added into SBL definition.
- Saltmarsh
- NEW GROUP: Lowland species rich grasslands: includes Lowland calcareous rich and Lowland neutral species rich grasslands and Species rich fen meadows and rush pastures. Explicitly excludes machair which remains separate
- NEW GROUP: Upland grasslands: includes Upland hay meadows, montane grassland and tall herb communities
- Coastal floodplains and dune slacks
- Purple moor grassland rush pastures: remove
- Hedgerows and road verges
- Arable field margins
- NEW GROUP: Upland scrub: includes willow, which requires separate and additional action to others and also includes juniper, birch, willow
- Montane grasslands: now in upland grasslands
- Montane willow scrub: Now in upland scrub
- Wet heath
- Add 'Species rich' Dry heath – includes *Empetrum*
- Juniper scrub
- Moss and lichen dominated mountains and liverwort heath
- Tall herb communities now in upland grasslands – but keep general – this is more than just ledges
- Alpine sub alpine heath
- *Dryas octopetala* mats – keep for now
- Screes
- Inland cliffs, rock pavements and outcrops with Scotland relevant sub categories
- Base rich fens with 4 Scotland relevant sub categories
- RENAME: Urban: to native species rich, connected urban habitats. Sub categories are: Nature networks in urban areas: connectivity, less mown, semi natural habitats
- Lowland rivers
- Raised and blanket bogs
- NEW GROUP: Naturally moderate and low nutrient lochs, ponds and pools: with loch and river shores
- NEW HABITAT: Ponds
- Valley mires
- Upland streams
- Scotland's rainforest
- Lowland broadleaved woodland
- Caledonian Forest
- Bog woodland
- Riparian woodland and scrub

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- NEW HABITAT: Ravine woodland
- Ancient birchwood

Habitats data deficient:

Temporary pools – prioritised for research

This feedback has been collated by from expert input:

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David Hall, Butterfly Conservation

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Scottish Environment LINK is the forum for Scotland's voluntary environment community, with 50 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society.

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