

## Orkney Islands Council

### **Orkney Local Biodiversity Action Plan**

#### Consultation Report

Consultation Period: 14 June – 9 August 2018

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
IP(AI)876	Interested Person	1	I would like to make a few comments concerning the LBAP document recently circulated. In my opinion this is an invaluable piece of work, which should serve as a springboard for the development of and promotion of the unique Natural Capital of the Orkney Islands, both above and below the water.	Comment noted and welcomed.	N/A
IP(AI)876		2	My focus as a Marine Scientist is to study and make available the knowledge and evidence base on marine life, as may be required to inform robust planning and policy decision making. In this time of unprecedented climate change with its associated consequences such as loss of Biodiversity, increase in sea levels, increased storm events, outbreaks of pest species etc, it is more important than ever that we have a thorough working understanding of some of the key habitats and species which are essential to underpin the resilience of our human existence with particular requirements for food security and water quality.	Comment noted.	N/A
IP(AI)876		3	I will certainly actively be using this document as part of teaching and research materials at ICIT on our world leading programmes in the near future, to highlight what is known for key habitats, and to design research questions to fill in gaps of the knowledge. In particular it is important to develop the knowledge on how to successfully maintain and also to restore valuable habitats so that they can provide essential ecosystem services and functions for our society.	Comment noted and welcomed.	N/A
IP(AI)876		4	I commend the team for putting together this very informative document, and I hope that the OIC will be able to use the information in a positive way to enhance and promote the Orkney environment, which is one major reason why so many visitors wish to come here to see and enjoy.	Comment noted and welcomed.	N/A
IP875	Interested Person	1	<p>Greenspace:</p> <ul style="list-style-type: none"> <li>-Encourage community scale audit of biodiversity enhancement opportunities/constraints.</li> <li>-Encourage voluntary groups with access to community gardens/polytunnels to provide locally sourced wildflower plugs for sale to local projects /individuals.</li> <li>-Encourage local groups to participate in community bio -diversity projects by promoting health benefits of such participation.</li> </ul>	<p>There is already potential for voluntary groups such as Brownies, Guides and Scouts to take part in biodiversity projects, when working towards certain badges. There is also scope for participation through the Duke of Edinburgh Award scheme.</p> <p>Any biodiversity projects undertaken by the Council in</p>	<p>Action 6 has been amended as follows:</p> <p>Work with schools and community groups to identify and establish biodiversity enhancement projects in existing greenspaces.</p> <p>Action 10 has been amended as follows:</p> <p>Engage with local plant growers / suppliers to investigate the feasibility of establishing a supply</p>

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
			-Encourage wider participation by incentivising involvement via some form of award scheme. -Use social media more effectively to spread the biodiversity message.	in conjunction with volunteers would be reported through Facebook and Twitter, as well as the Orcadian and Radio Orkney.	of wildflowers, including pond and wetland plants, grown from locally sourced seed.
IP875	Interested Person	2	Peerie Sea -Parts of the wider PS area currently managed as amenity grassland might be beneficially rewilded. -as noted in the report Otters still use the lagoon. Cover however is poor and could be improved. The small fenced enclave in front of Kirkwall Power Station could be enhanced so that otters using the area had somewhere secure to lie up. -Is the boating pond still used? If not; might it not be more appropriate to integrate it with the semi-natural parts of the lagoon and use the current building as an interpretation centre?	The Council is actively reviewing management of the Peedie Sea and any future management plan may include areas that are left uncut.  If approached for ideas on how to improve habitat for otters in this area, we would mention this suggestion.  The boating pond and building are still in use; however, any enhancement project in this area would include further interpretation.	N/A
IP875	Interested Person	3	Crafty The small area of relict fen and associated ditches (NGR HY446106) provides a significant locality for spawning amphibians (Common Frog and Toad) which in turn provide a seasonal resource for Otters and Grey Herons.	We are aware of this area and consider that it is probably best left as it is, without any enhancement. It is unlikely to be subject to development pressure, due to flood risk.	N/A
IP875	Interested Person	4	Farmland Farm drives and tracks offer unrealised opportunities for biodiversity enhancement.	The potential biodiversity value of these areas would be highlighted through Action 1, through courses provided at Orkney College.	N/A
IP875	Interested Person	5	Sea Trout Action Plan  I welcome this Plan and the proposed study; anything which provides us with useful information about this iconic species can only be encouraged. I don't underestimate the difficulties, however. The timeline given in the draft document seems very tight, perhaps impossibly so.	Noted and agreed.	The timeline has been amended:
IP875	Interested Person	6	Smolt Tagging Some progress has been made recently with acoustic tagging of sea trout smolts and it would be useful to know if smolts are attracted to salmon cages in Orkney. Cons: tags and receivers are expensive and the tag batteries have a short life. A good spawning burn and salmon enclosures at the optimum stage* (for lice densities) of the salmon production cycle required.	These comments have been noted and will be considered when options for sea trout projects are discussed.	N/A

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
IP875	Interested Person	7	<p>Post Smolt Tagging (PST) Using samples, (minimum 30) of mixed aged fish obtained via sweep netting and following an agreed handling and health and safety protocols collect data on fish size(length,weight),condition, lice burden, scales,(life history),skin swabs(genetics),tag insertion and reading(if applicable). Sampling sites should include at least one that is relatively remote from current aquaculture sites, Graemeshall perhaps? Encourage local and visiting anglers to Participate in a tag recovery scheme. This might need to be incentivised but could be facilitated by the development of an easy to use on-line App. PST would need to be carried over at least two seasons. Fisheries Trusts on the West Coast seem to have no problems finding volunteers to help with the netting required but of course, sampling, and necessary fish anaesthesia would have to be properly supervised and managed by someone with the appropriate experience and licences.</p>	These comments have been noted and will be considered when options for sea trout projects are discussed.	N/A
IP875	Interested Person	8	<p>Spawning Burns Only 26% of Orkney Burns are used for spawning. I think this should and could be increased. Orkney Farmers and land managers might be willing to be involved if burn restoration work could be incentivised perhaps under one of the various agri-conservation schemes.</p>	The biodiversity value of burn restoration could be highlighted during consultation on the shape of any agri-environmental schemes that are established post-Brexit.	The following text has been inserted under the Current factors affecting the species sub-section:  <i>"In Orkney, key factors are identified as the availability of suitable spawning habitat in freshwater burns and the potential for interaction with farmed salmonids once the fish enter their marine phase. Spawning burns in Orkney have been significantly modified over the years, mainly through agricultural development and the associated need to drain land. However, evidence from the OTFA electrofishing programme indicates that, over time, even straightened burns can support healthy numbers of young trout. During 2012 a project undertaken to enhance spawning habitat in the Bu Burn, Orphir was funded by the Scapa Flow Landscape Partnership Scheme."</i>
IP875	Interested Person	9	<p>Aquaculture Would like to see independent audit of lice reports from salmon farms in Scapa Flow. Sea Trout caught in here carry sea lice; therefore, I find it very hard to believe that no salmon farms in Orkney have lice which is what the current statistics published by SSPO seem to Assert..</p>	This issue is out-with the remit of the Orkney LBAP.	The following text explaining this has been inserted into the Current actions and opportunities sub-section:  <i>"Marine Scotland is the regulatory authority in relation to sea lice monitoring in farmed fish and the Scottish Environment Protection Agency (SEPA) licences the use of chemicals to treat sealice infestation."</i>

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
IP875	Interested Person	10	"Restocking"? Ask Orkney Trout Fishing Association to clarify its restocking policy in brackish waters especially those used by sea -trout.	This point will be clarified when options for future study are discussed.	N/A.
IP875	Interested Person	11	Taking things further: It would be helpful to look into the possibility of setting up Sea Trout Study Group which might become a forum for interested parties to come together: landowners, anglers, naturalists, statutory bodies and fish farmers.	This will be considered during implementation of the Sea trout SAP.	N/A.
IP877	Interested Person		It is with interest I listen to the debates around the local grass cutting issues. I too have a grass cutting dilemma/barriers, mowing every week is physically difficult. As a keen gardener who worked in horticulture I decided to use prior knowledge to solve the this. I now only mow the lawn (approx. 30mx30m) once a year. During the spring/summer the lawn is a riot of colour, movement and wildlife (many endangered or rare invertebrates).	Comment noted.	N/A.
IP877	Interested Person		My solution was simple, yellow rattle is a grass parasite and has been eradicated by modern farming practice, its is loved by bumble bees and it also eradicates certain grasses like Yorkshire fog completely and changes the grass mixture of the sward. This allows other meadow flowering plants to thrive (also sown) The grasses do become dominant again as the rattle (an annual plant that requires winter germination) dies back around August/Sept. The flower meadow then returns to a lawn whereupon it is cut for winter and remains as such until the Daffodils emerge in the spring and the rattle again takes over. The result is one cut per year and perhaps a scarify.	The Council has already used yellow rattle when creating wildflower areas in the grounds of the Pickaquoy Leisure Centre and it has worked well. The area alongside the swimming pool is a good example.	N/A.
IP877	Interested Person		Though this had an initial outlay of time or cost (seed sourced locally, it can be bought commercially) each year this becomes self-sown if the single grass cut is done correctly and so this becomes the only cost. This would not fit every grass cutting site, the amenity value for areas like the Peedie sea could be positive and add to our scenic and biodiversity heritage. I hope this would be of interest to either this discussion or the department responsible for grass cutting. Should anyone want to discuss this further or view my lawn I would be happy to pass on any practical advice. I have noted other land owners locally now following this approach for amenity reasons. I hope this is helpful or an opportunity, for should we not be encouraging not just the preservation of existing habitats but improving or re-creating new ones wherever possible, especially when the council organise both these areas of concern. Yours John Weatherall.	The Council is currently considering a number of options for future grass maintenance / wildflower meadow creation and the use of yellow rattle will indeed be one of these.	N/A.
IG11	Interested Group	1	<i>The seas around Scotland provide a source of offshore renewable wave, tidal and wind energy.</i>  This is a commercial activity, and not without potential to damage diversity, so inappropriate to be included in the 'benefits only' section. This should be listed in 'Issues, opportunities and actions for the Marine Environment'	The preceding paragraph explains that we gain much of our food from the sea and intertidal areas. Most marine food products are made available to the general public through the commercial activities	N/A.

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
				of the fishing and aquaculture industries.  Both the provision of food and energy may be accurately described as ecosystem benefits.	
IG11	Interested Group	2	<p><i>These include the physical effects of scallop dredging; damage caused by anchors and moorings; deposition of fish wastes from aquaculture and interaction with wild fish populations.</i></p> <p>There are a lot of issues that have the potential to impact on biodiversity, terrestrial farming for one, plus pollution risk from ship to ship transfers why single out Aquaculture? Appropriate regulation ensures that Aquaculture has minimal risk to diversity – there is no recognition of that here</p>	Comment noted.	Agricultural runoff and pollution from shipping have been added to the list of activities with potential to impact on biodiversity.
IG11	Interested Group	3	<p><i>Once the appropriate governance and resourcing arrangements are in place, the first step in the plan making process will be to produce a State of the Environment report which will provide a baseline analysis of what is currently known about the marine environment of our local coastal waters. Through its marine theme the LBAP seeks to add to the available data on the biodiversity of Orkney's marine environment.</i></p> <p>How exactly will this be resourced and informed? Distinct lack of recognition of the role that the regulatory bodies already play in protecting biodiversity. More information about how exactly the LBAP will add to currently available data is needed.</p>	The LBAP seeks to encourage further research into the marine environment of Orkney, with the aim of improving our knowledge and understanding marine biodiversity in Orkney waters. The Council has submitted an application to the European Maritime and Fisheries Fund to fund a State of the Environment Assessment. This assessment will work with the regulatory authority and wider stakeholders to collate environmental data to underpin future marine planning. Provision of a State of the Environment Assessment is a statutory requirement for regional marine planning under the Marine (Scotland) Act 2010.	N/A.
IG11	Interested Group	4	<p><i>They are often found in tide-swept narrows such as the entrances or sills of sea lochs and the best-known examples occur within a number of sea lochs on the west coast of Scotland.</i></p> <p>Therefore need justification as to why it's such a priority for the Orkney LBAP specifically</p>	Flame shell beds are identified as a Priority Marine Feature and are therefore included in the Scottish Biodiversity List as a priority for conservation. The reasons for conserving biodiversity are explained in Section 1 of the draft LBAP.	The following text has been added: "however, smaller beds are also known to be present in Orkney waters."
IG11	Interested Group	5	<i>Further ground truthing will be necessary to improve current knowledge and understanding of this species.</i>	The purpose of the Flame shell Habitat Action Plan is to add to	N/A.

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
			This should take place before determination if an action plan is required for Orkney waters.	current knowledge on the distribution and extent of this habitat in Orkney waters. Predictive modelling will be the first step, followed by ground truthing.	
IG11	Interested Group	6	<p><i>Deposition of fish wastes and surplus feed from aquaculture cages can have a blanketing effect, blocking the light that is necessary for photosynthesis by attached seaweed species.</i></p> <p>Flame shell beds are a very sensitive biogenic (reef forming) habitat and similar to maerl beds are sensitive to seabed deposition and chemical discharges. This has been set out in SNH Management Advice for Marine Protected Areas with this feature such as Loch Creran MPA.</p> <p>Significant impacts however are only likely to occur if a fish farm was sited either directly over a flame shell bed or was immediately adjacent to one. Nutrient enrichment within a large water body is unlikely to be an issue.</p> <p>Flame shell beds are not common and tend to occur in distinct areas with high currents and relatively shallow depth (less than 30m) It is therefore unlikely that new fish farms will interact with this habitat and any new fish farm would be required to demonstrate minimal interaction with priority features such as flame shell reefs prior to determination through the various permissions and licencing schemes required to operate a farm.</p>	Comment noted.	<p>The following text has been inserted under the Current actions and opportunities subsection:</p> <p>“Any new aquaculture application would be required to demonstrate how it gives due regard to Priority Marine Features, in accordance with SG Aquaculture Development Criterion 2, prior to determination through the various permissions and licencing schemes required to operate a farm.”</p>
IG11	Interested Group	7	<p><i>Chemical therapeutants used to treat caged fish may also have a detrimental effect on Flame shell bed species assemblages.</i></p> <p>See above – the consenting process would avoid any conflict at the outset. As has been very acutely experienced in West Coast waters, these beds are far more at risk from physical disturbance from mobile gear, and not aquaculture activity.!</p>	Please see the response to comment 6.	<p>The following text has been inserted under the Current actions and opportunities subsection:</p> <p>“Any new aquaculture application would be required to demonstrate how it gives due regard to Priority Marine Features, in accordance with SG Aquaculture Development Criterion 2, prior to determination through the various permissions and licencing schemes required to operate a farm.”</p>
IG11	Interested Group	8	<p><i>1. Undertake a predictive modelling study to identify areas which may support Flame shell beds by December 2019.</i></p> <p>Any output is likely to significantly overestimate the likely extent of this habitat</p>	Undertaking predictive modelling would be the first stage in the study and would indicate areas where further ground-truthing would be necessary to confirm or discount presence of the habitat. Mapping of Flame shell beds would only be carried out once their presence had been confirmed	N/A.

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
				through ground-truthing, i.e. by under-water survey.	
IG11	Interested Group	9	<p>2. <i>Ground-truth potential Flame shell beds identified by the predictive modelling study and map these by December 2023.-</i></p> <p>Predicted areas of this habitat should not be used to exclude development but used only to guide where detailed survey work should be focussed, i.e. confirm presence/absence, then proceed on those findings.</p>	Please see the response to comment 8.	N/A.
IG11	Interested Group	10	<p>4. <i>Identify indicator species supported by Flame shell beds for further research and monitoring, in order to improve knowledge and understanding of the habitat, including its capacity for blue carbon storage. (Lead: ICIT)-</i></p> <p>Not appropriate at this stage – require proof that significant beds are actually present in Orkney waters first.</p>	The purpose of the Flame shell HAP is to undertake research into the distribution and extent of Flame shell beds in Orkney, to improve current understanding of the additional biodiversity they support and to quantify their capacity for blue carbon storage.	N/A.
IG11	Interested Group	11	<p><i>...surplus feed from aquaculture cages can have a blanketing effect-</i></p> <p>Due to latest technology it is extremely unlikely that any waste feed will accumulate outside the pens.</p>	Comment noted.	<p>The following text has been inserted under the Current actions and opportunities subsection:</p> <p><i>“Any new aquaculture application would be required to demonstrate how it gives due regard to Priority Marine Features, in accordance with SG Aquaculture Development Criterion 2, prior to determination through the various permissions and licencing schemes required to operate a farm.”</i></p>
IG11	Interested Group	12	<p><i>Deposition of fish wastes and surplus feed from aquaculture cages can have a blanketing effect, blocking the light that is necessary for photosynthesis. Chemical therapeutants used to treat caged fish may also have a detrimental effect on Maerl beds and associated species assemblages.</i></p> <p>Maerl beds are sensitive to the pressures associated with finfish farming (seabed deposition and chemical discharge) but potential impacts would only be relevant if a farm was directly above or immediately adjacent to a maerl bed.</p> <p>The wording of this paragraph could be improved as words like blanketing and blocking light are misleading.</p> <p>Any new fish farm would be required to demonstrate a lack of interaction with such habitat before it could be consented in the first place.</p>	Please see the response to comment 11.	<p>The following text has been inserted under the Current actions and opportunities subsection:</p> <p><i>“Any new aquaculture application would be required to demonstrate how it gives due regard to Priority Marine Features, in accordance with SG Aquaculture Development Criterion 2, prior to determination through the various permissions and licencing schemes required to operate a farm.”</i></p>

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
			There is no recognition of the site selection, modelling and monitoring process required by regulation before any site is consented		
IG11	Interested Group	13	<p>....<i>detrimental effect on Maerl beds and associated species assemblages.</i>-</p> <p>Veterinary medicines are very rarely used in Orkney. In any case, regulations would guard against this risk</p>	Please see the response to comment 11.	<p>The following text has been inserted under the Current actions and opportunities subsection:</p> <p><i>“Any new aquaculture application would be required to demonstrate how it gives due regard to Priority Marine Features, in accordance with SG Aquaculture Development Criterion 2, prior to determination through the various permissions and licencing schemes required to operate a farm.”</i></p>
IG11	Interested Group	14	<p><i>The eutrophication of coastal waters from farmland runoff.</i></p> <p>Why mentioned here but not in papers on Maerl and Flame shells?</p> <p>Is there any evidence?</p> <p>If there was turbidity at the level you are suggesting then the salmon wouldn't be able to live in the pens either (clogged gills). There is no evidence provided for this statement.</p>	Seagrass beds commonly develop in relatively shallow water where they are more likely to be affected by farm runoff.	<p>This paragraph has been updated to include the following text from the SNH report Descriptions of Scottish Priority Marine Features:</p> <p><i>“Seagrass beds are sensitive to physical damage, nutrient enrichment and siltation which reduces the amount of sunlight reaching the leaves.”</i></p> <p>The following text has been inserted under the Current actions and opportunities subsection:</p> <p><i>“Any new aquaculture application would be required to demonstrate how it gives due regard to Priority Marine Features, in accordance with SG Aquaculture Development Criterion 2, prior to determination through the various permissions and licencing schemes required to operate a farm.”</i></p>
IG11	Interested Group	15	<p><i>Runoff from land and increased suspended solids from aquaculture operations can also increase turbidity, decreasing the sea grasses' ability to compete with other species-</i></p> <p>Seagrass beds are plants which photosynthesis so are normally located in relatively shallow water (0-4m) and therefore unlikely to interact with locations for fish farming</p>	Comment noted.	<p>The Current factors affecting the habitat subsection has been amended in line with SNH's PMF Guidance as follows:</p> <p><i>Dredging and bottom trawling can tear out the root systems, essential to the community's survival. Boat anchors have the same effect if inappropriately deployed or left to drag.</i></p> <p><i>Seagrass beds are sensitive to physical damage, nutrient enrichment and siltation which reduces the amount of sunlight reaching the leaves. Environmental sources of impact include long periods of elevated sea temperature, extremes of rainfall, low levels of insolation and the long-term</i></p>



<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
					<p><i>cycles in oceanic circulation. These factors will be affected to different degrees by climate change.</i></p> <p><i>Currently UK seagrass populations are considered degraded following significant declines due to fungal 'wasting' disease in the 1920s and 30s.</i></p>
IG11	Interested Group	16	<p>Transfer of parasitic sea lice between skate and other fish species.</p> <p><i>Lepeophtheirus salmonis</i> is specific only to salmonid species. Although there is some evidence of mackerel being affected by sea lice which normally target salmonids, there is no evidence of demersal species such as skate being affected.</p> <p>Parasites from finfish farming are not a pressure identified in the Loch Sunart to Sound of Jura MPA for skate and is not listed as a pressure on the FEAST sensitivity tool. Skate will rarely be in shallow enough water to come into contact with sea lice and even if they did attach the thick skin of a skate would be unlikely to provide a suitable substrate for either grazing or attachment. Skate have their own parasites including large leeches.</p> <p>There is no evidence to substantiate this claim and it should be removed.</p>	Comment noted.	Reference to "The transfer of parasitic sea lice between skate and other fish species" has been removed from the Flapper skate SAP.
IG11	Interested Group	17	<p><i>Sea trout feed on a variety of other animals, from crustaceans and molluscs to other small fish, especially sprat, sand eels and juvenile herring.</i></p> <p>No reference to feed abundance or supply in proposed BAP</p>	Little is known about overall food abundance; however, as sea trout are opportunistic feeders, a wide range of prey species is available to them within Orkney waters.	The following text has been inserted: <i>"Data from these studies indicates that juvenile density in sea trout burns varies between sites and between years but tends to occur within the range of 0 to just over 3 trout per square metre of burn."</i>
IG11	Interested Group	18	Around 80 burns have now been surveyed by electrofishing, with Sea trout being found in the following- This suggests a presence/absence assessment, rather than any indication of abundance.		
IG11	Interested Group	19	<p><i>Current factors affecting the species.</i></p> <p>The first paragraph identifies a wide range of factors which may affect wild fish but continues to focus on only one of these – the interaction with salmon farming. For this SAP to be holistic and representative of the challenges to species conservation it needs to consider all issues for wild sea trout in Orkney.</p>	Comment noted.	<p>To take account of this response the Action plan an additional objective has been included in the Sea trout SAP:</p> <p><i>"Increase knowledge and understanding of Sea trout populations in Orkney waters."</i></p> <p>The following text has also been inserted:</p> <p><i>"In Orkney, key factors are identified as the availability of suitable spawning habitat in freshwater burns and the potential for interaction with farmed salmonids once the fish enter their marine phase. Spawning burns in Orkney have been significantly modified over the years, mainly</i></p>

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
					<i>through agricultural development and the associated need to drain land. However, evidence from the OTFA electrofishing programme indicates that, over time, even straightened burns can support healthy numbers of young trout. During 2012 a project undertaken to enhance spawning habitat in the Bu Burn, Orphir was funded by the Scapa Flow Landscape Partnership Scheme."</i>
IG11	Interested Group	20	<i>.....declining in many parts of the UK.</i> What is population status in Orkney?	This is an area where we aim to gain further information. One of the actions in the Seatrout Species Action Plan is to <i>Investigate the potential aims and scope of a population study to increase understanding of the abundance and distribution of Sea trout in Orkney coastal waters.</i>	N/A.
IG11	Interested Group	21	<i>increased predation and genetic introgression due to hybridisation with introduced fish.</i> Also overfishing, mentioned in 2010 OTFA report	Historic over-fishing is already mentioned in the subsection "Current factors affecting the species".	N/A.
IG11	Interested Group	22	<i>Wild Sea trout, in particular juvenile fish entering the sea from spawning burns, are vulnerable to infection by the sea lice species Lepeophtheirus salmonis.</i> Lepeophtheirus salmonis is not a salmon farming issue in Orkney. Any Leps found on wild sea trout are not emanating from fish farms in Orkney, as demonstrated by the quarterly SSPO figures.	The presence of very low numbers of <i>L. salmonis</i> on individual farmed salmon may not pose an issue to the aquaculture industry or the health of farmed fish; however thousands of fish are held in each cage and, when this is taken into consideration, even 0.5 or fewer egg-bearing lice per fish results in potential for the release of lice larvae in numbers that are significantly above naturally occurring background levels.	N/A.
IG11	Interested Group	23	<i>...potential to impact on sea trout at the population level.</i> In Orkney? See previous comment. Otherwise too general a statement for the region-specific BAP	Please see response to comment 22.	N/A.
IG11	Interested Group	24	<i>Data collected throughout the west coast of Scotland showed that the proportion of individual sea trout with sea louse burdens above a level known to cause physiological stress increased with the mean weight of</i>	We are aware that topographical conditions in Orkney are different to those in Wester Scotland. Therefore, the effects of site	N/A.

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
			<p>salmon on the nearest fish farm and decreased with distance from that farm.</p> <p>It is assumed that this is a reference to Middlemas (2013). If data from elsewhere in Scotland is to be included here it needs to also make a link to the Orkney environment for sea trout which is different to the West coast of Scotland.st fish farm.</p>	<p>specific factors including tidal currents, prevailing winds and local topography are acknowledged in the following paragraph.</p>	
IG11	Interested Group	25	<p><i>The extent to which Sea trout populations are affected is not clear and will depend on movements of both lice and Sea trout populations, which are currently not well understood. The larval stages of sea lice are planktonic, occupying the upper layers of the water column. Site specific factors including tidal currents, prevailing wind and local topography, can have a significant impact on the direction and extent of lice dispersal.</i></p> <p>Irrespective of the presence of salmon farming, the effect of sea lice on the species at population level is poorly understood, e.g. to what extent are there sea lice-attributable effects on mortality and population density?</p>	<p>Action 3 of the Sea trout SAP seeks to enable a greater understanding of this issue in Orkney waters:</p> <p><i>“Design and undertake a research study which will help determine how sea lice burdens in wild Sea trout are influenced by proximity to farmed salmonid species in Orkney waters.”</i></p>	N/A.
IG11	Interested Group	26	<p><i>Current actions and opportunities.</i></p> <p>No actions have been listed here. Presence on a conservation list is not a tangible, region-specific action. Similarly, planning control and associated existing regulations are not actions.</p> <p>What about the foundation of a fishery trust on Orkney focussed on the conservation of the species? This was mentioned in a 2010 OTFA report. The OTFA is a voluntary body and does not have charitable status or receive government funding, which limits its resources for conserving a regionally important species.</p> <p>At the very least, regulation is mentioned in this section.</p>	<p>The LBAP Steering Group considers that implementation of the Orkney Local Development Plan Policy 12 and Supplementary Guidance Aquaculture represents action to protect biodiversity interests.</p>	<p>The following text explaining the regulatory system relating to sea lice and farmed salmon has been inserted into the Current actions and opportunities sub-section:</p> <p><i>“Marine Scotland is the regulatory authority in relation to sea lice monitoring on farmed fish and the Scottish Environment Protection Agency (SEPA) licences the use of chemicals to treat sealice infestation.”</i></p>
IG11	Interested Group	27	<p><i>There are currently two aquaculture companies operating in Orkney waters and both have expressed a desire to participate in an independently run research project with the aim of improving knowledge and understanding of the relationship between aquaculture and local wild Sea trout populations. The Orkney Trout Fishing Association would also welcome further research into the issue.</i></p> <p>As previously discussed and minuted at the LBAP meeting in May 2017, the Aquaculture Industry is keen to participate in an ‘independently run’ project to increase knowledge and understanding of the sea trout</p>	<p>Comment noted.</p>	<p>To take account of this response the Action plan an additional objective has been included in the Sea trout SAP:</p> <p><i>“Increase knowledge and understanding of Sea trout populations in Orkney waters.”</i></p> <p>Action 1 has also been amended as follows:</p>

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
			population status in the whole of Orkney, particularly as the data which is available is incomplete and difficult to access.		<i>“Undertake a review of available literature on the pressures affecting Sea trout populations, in order to identify information gaps.”</i>
IG11	Interested Group	28	<i>Maintain and, where possible, enhance Sea trout populations in Orkney waters</i>  This is considered to be an appropriate objective, but it is not clear how a literature review and research project on sea lice will enhance sea trout populations. In our view, this objective does not match up with the identified targets.	Comment noted.	To take account of this response the Action plan an additional objective has been included in the Sea trout SAP:  <i>“Increase knowledge and understanding of Sea trout populations in Orkney waters.”</i>
IG11	Interested Group	29	<i>1. By September 2018, complete a review of the available literature regarding both the distribution of Sea trout in Orkney waters and the effects of aquaculture on wild Sea trout.</i>  This single-issue focus is inappropriate for a BAP.	Action 3 seeks to better understand the interaction between fish farming and Sea trout and has been prioritised in this SAP because of the recent significant growth and planned growth of the fish farming industry in Orkney and the identified increased risk to Sea trout. This action will be developed and taken forward as an independent study in collaboration with relevant stakeholders	Target 1 and Action 1 have been amended:  <i>Target 1: By March 2019, complete a review of the available literature regarding pressures affecting Sea trout in Orkney waters.</i>  <i>Action 1: Undertake a review of available literature on the pressures affecting Sea trout populations, in order to identify information gaps.</i>
KA	Key Agency	1	Thank you for your consultation, dated 19 July 2018, requesting comments from Scottish Natural Heritage on the Draft Orkney Local Biodiversity Plan 2018-2022. We welcome and support the development and production of the new targeted Orkney Local Biodiversity Action Plan for 2018-2022. Specific comments on the draft document are provided in the Annex to this letter. Please let me know if you require any further information or advice in relation to this Plan.	Comment noted and welcomed.	N/A.
KA2	Key Agency	2	The layout and format of the 2018-2022 Orkney LBAP is welcomed	Comment noted and welcomed.	N/A.
KA2	Key Agency	3	On page 8, under ‘The Orkney Native Wildlife Project’ heading we suggest writing out Scottish Natural Heritage in full the first time and then abbreviate with SNH thereafter. So it would read “In 2014 Scottish Natural Heritage (SNH) commissioned a report...”	Comment noted.	Page 8 has been amended to take account of this comment.
KA2	Key Agency	4	Within the Farmland theme under the ‘action plan targets’ and ‘proposed action with partners’ sections on page 25 we suggest considering moving action plan target numbers 2 & 3 into the ‘proposed action with partners’ section and replacing them with a re-worded version of proposed action number 3.	We have opted to retain targets 2 and 3 as they will enable us to monitor the Plan’s progress.	Target 2 has been amended to refer to public events, as RSPB and SNH regularly provide biodiversity information at local agricultural shows.

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
KA2	Key Agency	5	<p>We have noted a few minor typographical errors such as:</p> <ul style="list-style-type: none"> <li>- Page 12, " end quote commas missing.</li> <li>- Page 34, no hyphen in damselfly.</li> <li>- Page 44, no d in Wigeon.</li> </ul> <p>- Suggest consistency throughout the plan with regards to the use of acronyms. In general they should be written in full the first time they are used with the acronym in brackets and thereafter the acronym can be used.</p> <p>- Suggest consistency throughout the plan with regards to the use of species scientific names. If some species have the scientific name following the common name then we suggest they all do (unless they don't have a common name). Once the scientific name has been used once it doesn't need to be inserted every time.</p>	Comment noted.	<p>These and other typographical errors have been corrected.</p> <p>The use of acronyms throughout the Plan has been reviewed and amended where necessary.</p> <p>The use of scientific names has also been reviewed and amended where necessary.</p>
KA18	Key Agency	1	<p>Thank you for allowing Scottish Water the opportunity to review and comment on Orkney Island Council's Draft Local Biodiversity Action Plan (LBAP) 2018. As a key consultee Scottish Water remain committed to continuing our work in partnership with Orkney Island Council. Having reviewed the Draft Local Biodiversity Action Plan I have a comment about a specific element of the proposed Action Plan as follows:</p>	Comment noted.	N.A.
KA18	Key Agency	2	<p>Page 25 – Theme 3: Peatland</p> <p>Scottish Water recognises the importance of the peatland areas in Orkney in terms of habitat for wildlife, carbon storage and regulation of water run-off and storage. It is worth pointing out those activities in and around peatland can have an impact on drinking water quality if not managed appropriately. Scottish Water is required to ensure that any proposed activity in peatland does not impact on the ability of Scottish Water to meet its regulatory requirements. Under Article 7 of the Water Framework Directive, waters used for the abstraction of drinking water are designated as Drinking Water Protected Areas (DWPA). The objective is to ensure that any activity within peatland areas does not result in deterioration of waters within the DWPA. We would request that Scottish Water's Sustainable Land Management (SLM) team be consulted on any activities or restoration works to peatland in advance and they can be contacted on <a href="mailto:protectdwsources@scottishwater.co.uk">protectdwsources@scottishwater.co.uk</a>.</p>	Comment noted.	<p>The following text has been inserted in the <i>Current actions and opportunities</i> section of the Peatland theme overview page:</p> <p><i>"Activities in and around peatland can impact upon water quality if not managed appropriately. Under Article 7 of the Water Framework Directive, waters used for the abstraction of drinking water are designated as Drinking Water Protected Areas (DWPA). Scottish Water is required to ensure that any proposed activity within peatland areas does not result in deterioration of waters within the DWPA. Scottish Water's Sustainable Land Management (SLM) team should therefore be consulted in advance, at <a href="mailto:protectdwsources@scottishwater.co.uk">protectdwsources@scottishwater.co.uk</a> in relation to any activities or restoration works to peatland."</i></p>
KA18	Key Agency	3	<p>Water Quality</p> <p>Scottish Water's abstraction for drinking water purposes is regulated by Scottish Environment Protection Agency (SEPA) and carried out in compliance with the Water Environment (Controlled Activities) (Scotland) Regulations 2011. Scottish Water will continue to work directly with SEPA and any other partner agencies to ensure our operational activities remain</p>	Comment noted.	<p>The following text has been inserted in the <i>Current actions and opportunities</i> section of the Peatland theme overview page:</p> <p><i>"Scottish Water's abstraction for drinking water purposes is regulated by SEPA and carried out in</i></p>

<u>Unique Reference</u>	<u>Respondent Type</u>	<u>Comment Number</u>	<u>Comments</u>	<u>Response from Orkney Local Biodiversity Action Plan Steering Group</u>	<u>Action</u>
			compliant with regulation and do not impact water quality to the detriment of aquaculture, flora and fauna in Orkney.		<i>compliance with the Water Environment (Controlled Activities) (Scotland) Regulations 2011. Scottish Water works directly with SEPA and any other partner agencies to ensure its operational activities remain compliant with regulation. "</i>
KA18	Key Agency	4	Similarly, Scottish Water's waste water treatment discharges are also regulated by SEPA under the above legislation which requires all of our waste water treatment operations to remain compliant with the specific consent license associated with each individual Waste Water Treatment Works. This ensures that any activity, which could result in pollution of the water environment, is controlled and managed to ensure no impact to the environment. Scottish Water remains committed to working directly with SEPA, any other agencies and the public to ensure our operations have no detriment to the water environment. Should there be any concerns to the contrary in Orkney; Scottish Water would encourage anyone to report this as soon as possible for urgent investigation through our Customer Helpline open 24 hours a day, 7 days a week on 0800 077 8778.	Comment noted.	The following text has been inserted under the <i>Issues, opportunities and actions for the Marine Environment</i> section of the Marine Environment theme overview page:  <i>"Scottish Water's waste water treatment discharges, including discharges to the marine environment, are regulated by SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 which require its waste water treatment operations to remain compliant with the specific consent licence associated with each individual Waste Water Treatment Works. This ensures that any activity, which could result in pollution of the water environment, is controlled and managed."</i>
KA18Mrin	Key Agency	5	I trust that the above is satisfactory in line with your consultation. Should you require further clarification, please do not hesitate to contact me directly.	Comment noted.	N.A.