

Orkney Local Biodiversity Action Plan 2018-2022: The Actions						
	Actions Under The Greenspace Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
G1.	Endeavour to provide good access to natural and semi-natural environments around settlements through the Orkney Core Paths Plan.	OIC.		Revised and amended Orkney Core Paths Plan was adopted in 2018.	http://www.orkney.gov.uk/Service-Directory/C/Core-Paths.htm	Complete.
G2.	Identify areas for biodiversity enhancement through the Kirkwall Urban Design Framework, with links to information in the LBAP.	OIC.		Arcadia Park was landscaped in early spring 2019 and includes woodland / shrub planting, areas of wildflower meadow, three ponds and a maze.	A plan of Arcadia Park may be accessed at: https://www.orkadian.co.uk/plans-unveiled-for-arcadia-park-project/	Underway.
				Orkney Islands Council is working with Papdale East residents to upgrade Core Path K9 and the Papdale East playpark. A bid to the Biodiversity Challenge Fund was successful and work is due to commence onsite during autumn 2021.		
G3.	Identify paths which would benefit from improved shelter, through planting trees and/or shrubs that are appropriate to the location and are beneficial for biodiversity.	OIC.	Orkney Woodland Group.	Areas of tree and shrub planting are included in the overall plan for Core Path K9 and the Papdale East playpark.	Jane Rawle has taken over the role of Woodland Officer and may be contacted at: Orkney Woodland Project & Woodland Trust Scotland. Old School, Rendall, Orkney. KW17 2EY. Email: janerawle.owp@gmail.com Tel: 07799331522	Underway.

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G4.	Create a list of nature-friendly plant species for the Council's Development Management team to provide to landscape architects for reference in the design of future developments.	OIC.	SNH, RSPB, Orkney Field Club.	A list of pollinator-friendly plants for Orkney gardens was completed in 2019.	A copy of the list is available to download from the OIC website at https://www.orkney.gov.uk/Service-Directory/L/outputs-from-the-orkney-lbap-2018-2022.htm	Complete.
G5.	Make the list of nature-friendly plants available at public events such as Family Day at the Orkney International Science Festival.	OIC, RSPB.	SNH.	The list of pollinator-friendly plants was made available by RSPB at County Show 2019 and by the Council's Environment Officer at Family Day of the Science Festival 2019.		Complete.
G6.	Work with schools and community groups to identify and establish biodiversity enhancement projects in existing greenspaces.	RSPB, OIC.		During spring 2019 the Council's Environment Officer helped schoolchildren to grow and plant wildflowers in the grounds of Shapinsay Community School.	Species planted and sown were: Red clover, meadow vetchling, selfheal, ox-eye daisy, red campion and common knapweed.	Ongoing.
G7.	Improve linkages between volunteering groups and opportunities, bringing together groups with suggestions for local projects.	OIC.	RSPB, ONWP.	The upgrade of Arcadia Park has benefited greatly from the work of local volunteers, including members of the Rotary Club of Orkney. During June 2019 young people from the Connect Project helped clear vegetation from the boardwalk through a wetland area at the Mull Head visitor centre		Ongoing.

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				Members of the Papdale East Playpark Association have contributed to the design of the proposed upgrade of Papdale Playpark.		
G8.	Make opportunities and contacts more visible to the public, as well as improving links with health and social enterprises.	OIC.	RSPB, SNH, ONWP.	NHS Orkney and members of the Local Access Panel were involved in the design of Arcadia Park.		Ongoing.
G9.	Prepare a pond creation guidance leaflet, adapting available guidance to suit an Orkney context.	OIC.	RSPB, SEPA, SNH.	During 2008 SAC published Technical Note 612 Ponds for Wildlife – Creation and Restoration. This may be used as a starting point for the new leaflet.		Not started.
G10	Engage with local plant growers / suppliers to investigate the feasibility of establishing a supply of wildflowers, including pond and wetland plants, grown from locally sourced seed.	OIC.	Update as this develops.	Inspired by a North Isles Landscape Partnership Scheme project to enhance degraded areas for biodiversity, a Sanday resident is in the process of setting up a wildflower nursery. The Council's Environment Officer has provided advice.		Not started.
G11	Support initiatives to reduce the non-essential usage of single-use products that contain plastics.	ALL.		Orkney was previously participating in the Cold-Water Islands Project; however, the project is not currently running. Agricultural plastics can be taken to Isbister Bros Ltd at depots in Kirkwall and Quoyloo. The waste is then shipped south to Solway	Information on the Cold-Water Islands Project is available at https://www.orcadian.co.uk/marine-plastics-in-orkney-to-be-tackled-as-part-of-pilot-project/ Information on how to dispose of agricultural plastics is available on	Ongoing.

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				Recycling. Alternatively, farmers can take clean plastic wrap to Chinglebraes Waste Transfer Station, St Ola, from where the materials go to Shetland for landfill. The Council also provides a kerbside bin collection service at cost, for the disposal of municipal type waste suitable for energy recovery (however this does not include plastic bale wrap or netting.	the OIC website at https://www.orkney.gov.uk/Service-Directory/R/agricultural-waste.htm	

Orkney Local Biodiversity Action Plan 2018-2022: The Actions						
	Actions Under The Farmland Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
F1.	Raise awareness of farming for biodiversity through the education system.	RSPB, Orkney College, OIC.		RSPB provided information packs for students in 2018.		Ongoing.
F2.	Promote the incorporation of low- or no-cost examples of biodiversity conservation and water protection measures into land management practices.	SNH, SEPA, SGRPID, SRUC.		RSPB has produced a leaflet entitled Five ways to help waders on your farm or croft. Wader conservation would be a relevant topic for many farmers in Orkney.	Copies of the leaflet are available from the RSPB office in Stromness, tel. 01856 850176. RSPB also provides detailed online guidance online at https://www.rspb.org.uk/our-work/conservation/conservation-and-sustainability/farming/advice/helping-species/	Ongoing.
F3.	Ensure that good practice examples of biodiversity conservation and water protection measures on farms are highlighted in future farm open days and other training events.	RSPB, SEPA, Orkney College SRUC.		Training events are included in the North Isles Landscape Partnership Scheme. RSPB is undertaking some practical work on habitat enhancement which could be used as a demonstration project.		Ongoing.
F4.	Continue to meet twice a year, as the Farmland Group, to discuss progress on the actions.	SGRPID, SNH, SEPA, RSPB, NFUS, SRUC, OIC, JC.		It is hoped that pilots for agri-environmental schemes may come forward that would have knowledge transfer elements. SNH is also working on an app.		Not started.

Orkney Local Biodiversity Action Plan 2018-2022: The Actions						
	Actions Under The Peatland Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
P1	Undertake a project to restore an area of degraded bog peatland.	RSPB.		Work has been completed on the Black Moss of Evrigert near Fibla Fiold in Evie. RSPB used a natural fibre, Sisal, to bridge/dam areas of degraded peat. The project appears to have been successful.		Completed.
P2	Undertake peatland restoration advisory events.	RSPB.	SNH, OIC.	The NatureScot Peatland Action Group will advise the Highland Park Distillery on a plan to enable more sustainable methods of peat extraction at Hobbister.		Underway.
P3	Arrange an event promoting sustainable peat cutting practices.	RSPB.	SNH.			Not started.
P4	Prepare advice on fire safety and discuss its incorporation into signage with the Scottish Fire Service and Orkney Local Access Forum.	OIC.	RSPB SNH (advice).		Guidance on the Muirburn Code is available from the NatureScot website at https://www.nature.scot/professional-advice/land-and-sea-management/managing-land/upland-and-moorland/muirburn-code	Not started.
P5	Raise awareness of the biodiversity of Upland heathland, e.g. by upgrading the on-site interpretation facilities at Mull Head Local Nature Reserve.	OIC.		A project to upgrade access and interpretation at the Mull Head LNR was completed in December 2020. New boardwalk sections and way markers have been installed, along with a GPS-based Tour Guide app. New information panels have also been installed in the car park.	The interpretation app may be accessed online at https://izi.travel/en/955e-mull-head-nature-reserve/en	Completed.

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	Actions Under The Marine Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
Flame Shell Beds						
M1.	Undertake a predictive modelling study to identify areas within Orkney coastal waters that have potential to support Flame shell beds.	ICIT.	SNH.	<p>This is a three-stage process. Step 1 was completed by ICIT in 2018 and the findings reported in a MSc thesis by Hannah Hood.</p> <p>Flame shell bed distribution was included in a Blue carbon audit of Orkney waters (2020).</p>	<p>Hood, H. 2016 Assessment of <i>Limaria hians</i> contribution to the blue carbon resource in Scottish waters. MSc dissertation, Heriot-Watt University.</p> <p>Porter, J.S., Austin, W.A., Burrows, M.T., Clarke, D., Davies, G., Kamenos, N., Page, C., Smeaton, C., Riegel, S. and Want, A. (2020). Blue carbon audit of Orkney waters. <i>Scottish Marine and Freshwater Science Series</i> 11(3). <i>Marine Scotland Science</i> DOI: 10.7489/12262-1 https://data.marine.gov.scot/dataset/blue-carbon-audit-orkney-waters</p> <p>Flame shell beds are discussed in section 3.2.6.</p>	Underway.
M2.	Undertake a ground truthing project in areas predicted to support Flame shell beds and map the distribution and extent of beds found to be present.	ICIT.	SNH, Seasearch.	This action is linked to M1 above.	See M1	Underway.
M3.	Take account of any new data on Flame shell bed distribution in the State of the Environment Report for the forthcoming	OIC.	ICIT.	The State of the Environment Assessment was completed by Orkney Islands Council during 2020.	The State of the Environment Assessment is available online at https://www.orkney.gov.uk/Service-Directory/D/orkney-islands-marine-region-state-of-the-environment-assessment.htm	Completed.

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	Actions Under The Marine Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
	Orkney Regional Marine Plan.			NatureScot has completed a drop-down survey funded by the European Maritime and Fisheries Fund.	Biological analyses of seabed imagery from within and around Marine Protected Areas in Orkney, Shetland, Inner Sound, and Islay and Jura in 2019: Scottish Marine and Freshwater Science Vol 12 No 2 – https://doi.org/10.7489/12364-1	
M4.	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.	ICIT.	SNH.	ICIT undertook a Blue Carbon audit project in Orkney between January and July 2019. A stakeholder meeting was held on 14 March 2019.	See Orkney Blue Carbon Audit under M1 https://data.marine.gov.scot/dataset/blue-carbon-audit-orkney-waters Flame shell beds are discussed in section 3.2.6.	Underway.
M5.	Identify a list of potential MSc dissertation projects or MPhil research topics relating to Flame shell beds.	ICIT.	SNH, NILPS.		Hood, H. 2016 Assessment of <i>Limaria hians</i> contribution to the blue carbon resource in Scottish waters. MSc dissertation, Heriot-Watt University.	Ongoing.
MAERL BEDS						
M6.	Continue to map the distribution, extent and depth of Maerl beds in Orkney, through collaboration with the Seasearch volunteer project.	Seasearch coordinator.	ICIT, OIC, NILPS.	A project to map maerl beds is underway. Records are welcome at any time.	https://data.marine.gov.scot/dataset/blue-carbon-audit-orkney-waters Maerl beds are discussed in Section 3.2.2.	Underway.

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	Actions Under The Marine Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
M7.	Develop a virtual dive project for the Nature Conservation Marine Protected Areas of the North Isles.	OIC, ICIT.	SNH, NILPS.	A contract to develop a virtual dive project been awarded to Aquatera Ltd through NILPS. ICIT are providing diver support. Eight 'stills' videos highlight benthic habitats of the North Isles.	Project delayed by COVID but back on track in 2021. The videos may be accessed at https://www.nilps.co.uk/news	Completed.
M8.	Develop a method for estimating the storage of blue carbon in the Wyre and Rousay Sounds MPA.	ICIT.	SNH, OIC.	The quantity of carbon stored in the Wyre and Rousay Sounds MPA has been estimated through the Orkney Blue Carbon audit.	https://data.marine.gov.scot/dataset/blue-carbon-audit-orkney-waters Maerl beds are discussed in Section 3.2.2.	Completed.
M9.	Identify a list of potential MSc dissertation projects and/or MPhil research topics relating to Maerl beds.	ICIT.	SNH, OIC, NILPS.			Ongoing.
Seagrass Beds						
M10.	Build on the findings of previous Zostera studies, through ground truthing projects, to determine	ICIT.	SNH, OIC.	Survey work was carried out in October 2018 by MSc students at ICIT.	https://data.marine.gov.scot/dataset/blue-carbon-audit-orkney-waters Seagrass beds are discussed in Section 3.2.3.	Underway.

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	Actions Under The Marine Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
	the distribution and extent of Seagrass beds in Orkney.					
M11.	Take account of any new data on Seagrass bed distribution in the State of the Environment Report for the forthcoming Orkney Regional Marine Plan.	OIC.	SNH.	The State of the Environment Assessment was completed by Orkney Islands Council during 2020. NatureScot has completed a drop-down survey funded by the European Maritime and Fisheries Fund.	The State of the Environment Assessment is available at https://www.orkney.gov.uk/Service-Directory/D/orkney-islands-marine-region-state-of-the-environment-assessment.htm Biological analyses of seabed imagery from within and around Marine Protected Areas in Orkney, Shetland, Inner Sound, and Islay and Jura in 2019: Scottish Marine and Freshwater Science Vol 12 No 2 – https://doi.org/10.7489/12364-1	Completed.
M12.	Identify indicator species supported by Seagrass beds, for further research and monitoring.	ICIT.	SNH, OIC.	To be completed by an MSc student.		Ongoing.
M13.	Undertake surveys to explore the potential presence of non-native species, e.g. <i>Diadumene lineata</i> , the orange striped green sea anemone.	ICIT.	SNH, OIC, Seasearch.	Nothing planned at the moment.		On hold.
M14.	Identify a list of potential MSc dissertation projects or MPhil research topics	ICIT.	SNH, OIC.			Ongoing.

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	Actions Under The Marine Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
	relating to Seagrass beds.					
Flapper Skate						
M15.	Undertake a tag and release (change to underwater camera) project for Flapper skate within North Isles waters.	OIC (NILPS).	Orkney Skate Trust, SNH.	The tag and release project will be replaced by a camera drop survey. Underwater cameras, community outreach project.		Underway.
M16.	Undertake a project to record Flapper skate egg cases found on North Isles shorelines.	OIC (NILPS).	Orkney Skate Trust, SNH.	A project to record Flapper skate egg cases is underway in a number of the North Isles.		Ongoing.
M17.	Continue to collect and collate data on Flapper skate from other areas of Orkney by:					Ongoing.
a.	Recording egg cases, both in situ and washed ashore.	Orkney Skate Trust.	Orkney Field Club, ICIT, OWIARC, Seasearch.			Ongoing.
b.	Recording skate sightings reported by seafarers, divers and detected by remote underwater cameras.	Orkney Skate Trust.	SNH, OIC, ICIT, Orkney Field Club, Seasearch.			Ongoing.

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M18.	Continuing the tag and release project throughout other parts of Orkney, with increased focus on Scapa Flow.	Orkney Skate Trust.	SNH, OIC, ICIT, Orkney Field Club.			Ongoing.
M19.	Undertake habitat surveys of areas displaying higher densities of Flapper skate records, as part of targeted surveys by SCUBA divers and the use of remote video technology.	Orkney Skate Trust.	SNH, OIC, ICIT, Orkney Field Club, Seasearch, NILPS.			Not started.
M20.	Continue to develop a DNA database for Flapper skate populations in Orkney, using tissue from adult captures and stranded egg cases containing embryos.	Orkney Skate Trust.	SNH, OIC, ICIT, Orkney Field Club.	This project is planned by Interreg, through a partnership between Queens University, Belfast and the University of Aberdeen. No involvement in Orkney.		Underway.
Sea Trout						
M21.	Undertake a review of available literature on the pressures affecting Sea trout populations,	OIC.	ICIT, SNH.	The Marine Scotland interactions working group is undertaking a literature review.		Underway.

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	Actions Under The Marine Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
	to identify information gaps.					
M22.	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.	OIC.	ICIT, SNH, SEPA, OTFA.	This action is linked to M21 above.		Not started.
M23.	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.	OIC.	ICIT, SNH, SEPA, SSF, OTFA.	This action is linked to M21 and M22 above.		Not started.
M24.	Update Supplementary Guidance Aquaculture to take account of the findings of the project report.	OIC.		This action is linked to M21, M22 and M23 above.		Not started.
M25.	Take account of the findings of the project report in the State of the Environment Report for the	OIC.	SEPA, SNH.	This action is linked to M21, M22 and M23 above.		Not started.

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	Actions Under The Marine Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
	forthcoming Orkney regional marine plan.					
Marine Litter						
M26.	Continue to support local clean-up initiatives for the collection and disposal of marine litter.	OIC.		<p>Bag the Bruck took place again during 2019, run by Outdoor Orkney. No events during 2020 or 2021 due to Covid-19 pandemic.</p> <p>A Ghost Fishing initiative has run in Scapa Flow for four years with the last event being held in October 2018.</p> <p>Orkney was previously participating in the Cold-Water Islands Project; however, the project is not currently running.</p> <p>Scottish Sea Farms took part in the Marine Conservation Society Beachwatch Beach Clean in autumn 2018 and 2020.</p>	<p>Participation in Cold Water Islands Project: https://www.orcadian.co.uk/marine-plastics-in-orkney-to-be-tackled-as-part-of-pilot-project/</p>	Ongoing.
M27.	Establish an annual litter removal scheme	OIC.	SEPA, NILPS.			Not started.

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	Actions Under The Marine Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
	on each of the populated North Isles.					
M28.	Support initiatives to reduce the non-essential usage of single-use products that contain plastics.	All.		Collate information, get back with any actions they have taken, email OIC Environment Officer.	Nationally legislation is being developed which aims to tackle single-use plastics. Consultation on the subject has closed. Details may be viewed on the Zero Waste Scotland website at FAQs - Consultation on restrictions to single-use plastics Zero Waste Scotland The 'End Plastic Soup' campaign has been successful in persuading some retailers to replace plastic components in their products. See https://endplasticsoup.nl/en/	Ongoing.
M29.	Raise awareness on the collection of fulmar corpses for the North Sea plastics study.	OIC.	RSPB.	OIC Biologist Jenni Kakkonen delivered a presentation at the Orcadians Going Green event. No corpse collections during 2020 due to avian flu outbreak. A Facebook campaign was completed in autumn 2020.	Van Franeker, J.A., Kühn, S., Anker-Nilssen, T., Edwards, E.W.J., Gallien, F., Guse, N., Kakkonen, J.E., Mallory, M.L., Miles, W., Olsen, K.O., Pedersen, J., Provencher, J., Roos, M., Stienen, E., Turner, D.M. & Van Loon, W.M.G.M. 2021. New tools to evaluate plastic ingestion by northern fulmars applied to North Sea monitoring data 2002-2018. Marine Pollution Bulletin 166: 112246. https://doi.org/10.1016/j.marpolbul.2021.112246	Ongoing.
Citizen Science						
M30.	Encourage members of the public to submit species records and observations to the Orkney Wildlife	OWIARC.	ICIT, Orkney Field Club.	On hold as future of OWIARC to be decided.		Ongoing.

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	Actions Under The Marine Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
	Information and Records Centre.					
M31.	Devise a simple recording method that is usable in the setting of a working vessel at sea.	OIC, ICIT.	SNH.	It has not been possible to proceed with this action; it should therefore be removed.		Removed.
M32.	Create a key card identification guide and/or app for specific marine species.	ICIT, OIC.	SNH.			Not started.
M33.	Publicise the information collated in schools and at public events such as the Orkney Nature Festival.	OIC, ICIT.	SNH, RSPB, Field Club.	This action is linked to M31 and M32 above.		Not started.
M34.	Encourage public participation in local events such as the Orkney International Science Festival.	OIC, ICIT.	SNH, Field Club.	ICIT held two events in September 2018: they hosted the Scapa 100 conference at the Stromness Museum; and also arranged an exhibition at the Stromness Museum. ICIT received a public engagement award for the year of the Sea. Orkney Field		Ongoing.

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	Actions Under The Marine Theme	Lead	Local Partners	Comments	Outputs (Reports, Etc)	Status
				Club provide grants for Citizen Science projects. ICIT participated in the Orkney International Science Festival during 2019 and 2020.		