



seasearch

2019 Scotland Summary Report



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Seasearch is funded and supported in Scotland by:



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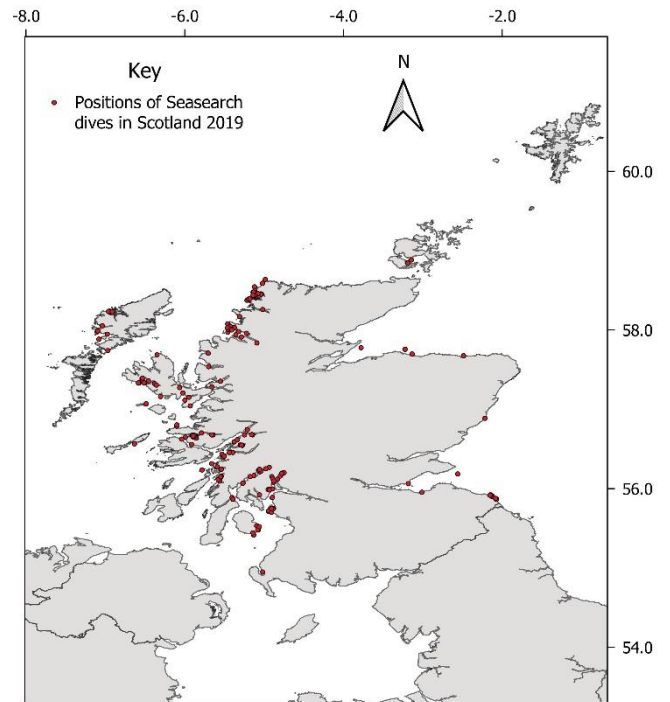
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Introduction

In total Seasearch received 382 forms from across Scotland, with 95 volunteers getting involved. This included 231 Observation forms, and 150 Survey forms, as well as one crawfish survey form.

In total, 187 forms were received from fourteen MPAs (or other protected designation) around Scotland, equating to 49% of the total count of forms received.

Seasearch carried out 4 targeted survey weekends through the year (excluding the Argyll and Bute survey efforts, covered by the Seasearch Argyll and Bute Annual Report). These included focused surveys working with local action groups, utilising Priority Marine Feature records, as well as exploratory trips to lesser recorded dive locations to fill data gaps.





Diving

Fairlie Oyster Survey 13th/14th April

Seasearch was invited by the Clyde Porpoise group to help further survey an area of suspected ancient oyster bed, near Fairlie. Thanks to boat and skipper resources donated by the group, we were able to mobilise two buddy pairs from Largs marina to carry out transects nearby to record oysters if present. Unfortunately, no oysters were recorded on this occasion, and due to bad weather only 2 waves of diving were carried out so there is still further potential for further survey work to be done in the area.



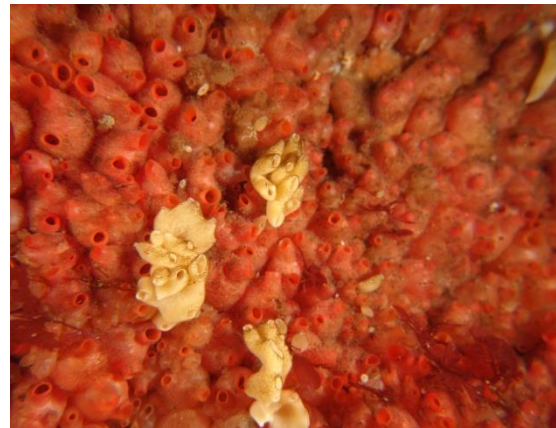
Kinlochbervie Seasearch trip 20th/25th May

A week-long Seasearch diving and recording trip was successfully completed in May 2019, using the excellent services of North East Dive including the vessel Keltic Lady and the Lodge House at Oldshoremore for accommodation. Organised by Iain Dixon, ten divers organised into pairs completed two dives per day over six days. For each site diver pairs either completed a Surveyor form or, depending on the site and diver distribution, contributed to a single group Surveyor form.

Sites ranged from the exposed Handa Island to the south of Kinlochbervie, where diving seabirds were seen underwater, to Eilean Nan Roin Mor to the north, and also included relatively sheltered sites within Lochs Inchar, Laxford and Dughail. Habitats ranged from the spectacular surge gulley at Minister's Point with encrusting communities of sponges, hydroids and sea squirts, through offshore exposed bedrock characterised by jewel anemones, diverse faunal bryozoan/hydroid turf and kelp communities at Bogha Mor, to the more sheltered sediments with scallops in the sea lochs. Priority Marine Features observed included kelp beds, northern sea fan and sponge communities and the northern feather star. Other species of interest included the fish john dory and the rosy starfish.



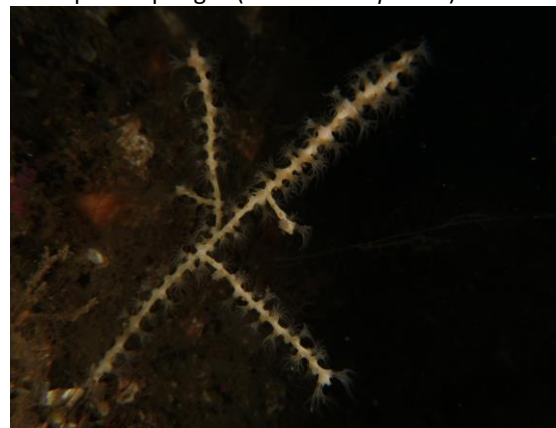
The rosy starfish (*Stichastrella rosea*)



Orange sea squirt (*Dendrodoa grossularia*) with white purse sponges (*Grantia compressa*)



John dory (*Zeus faber*)



Northern sea fan (*Swiftia pallida*)

FSC Millport BioBlitz 29/30th June

During the summer, Seasearch participated in the FSC BioBlitz held at Millport marine station, Cumbrae. We were lucky enough to have multiple teams of Seasearchers involved at the event, including a manned stall providing information to attendees, students and families taking part in the BioBlitz, as well as two subtidal collection teams with a shore dive team and a boat team thanks to the participation of Kilmarnock Sub Aqua Club who provided their club boat for the day.



Holy Loch and Loch Goil 6th/7th July

In July, Seasearch ran a weekend RIB charter with Wreckspeditions, a new charter boat set up out of Holy Loch, near Dunoon. It gave the opportunity for diving at the seaward mouths to Loch Long and Goil particularly that are not heavily dived at that southern extent due to the lack of boats but with importance as MPA areas which require spot checking. The trip involved 6 divers, who completed 4 dives. Features of interest recorded were horse mussels, sea pens and fireworks anemones.



Great/Little Cumbrae and Largs 14th/15th September

The end of a particularly wet and windy summer season concluded with a weekend trip based from Largs to dive sites around the Clyde and Cumbraes. Unfortunately, bad weather confined us to the neighbouring Holy Loch once again on the first day, but presenting another opportunity to dive incredibly diverse life on several wrecks close to the protection of the Marina. Following improved weather on the second day however we were able to dive exploratory sites along the east side of Great Cumbrae with impressive walls and ledges full of life.

Observer dive training Sept 29th

The day provided an opportunity to gain sign off dives at a local dive site near Arrochar for 8 divers. A chilly day meant two waves of divers, some completing a single dive, others completing two.



Events

Scotland's International Marine Conference 20th/21st Feb

Scotland coordinator Natalie Hirst attended Scotland's International Marine Conference held in Glasgow early in the year. Seasearch joined MCS hosting a stall in the breakout areas over the two days, where we took enquiries and sold ID guides and merchandise.



Scotland Envirolink evening reception June 5th

Seasearch Scotland has been extending its presence into more community initiative groups, and as such were invited to host a stand at the Scottish Parliament "People power" reception in June. This gave the opportunity for us to promote Seasearch to members of the Scottish Parliament and engage with other community groups from different constituencies to explore new connections and ways to help further shared conservation goals.



SeaScotland conference 19th June

Scotland coordinator Natalie Hirst attended the annual SeaScotland event, held in Glasgow in June. This was again a joint attendance with MCS whom we held a stall within the breakout area of the event held over one day, where enquiries were taken from people interested in joining and ID guides and merchandise sold.



Dunoon Summit to Sea festival 28th/29th September

Seasearch were invited to attend the Dunoon Summit to Sea festival held over a weekend in September. The festival also included an MCS beach clean which Scotland coordinator Natalie Hirst helped organise. Seasearch held a stand at the event aimed mainly at families, young people and the local community to highlight the importance of the area for marine life and ways children could get

involved particularly was a common enquiry which helped advertise the option of snorkelling for Seasearch.



FSC Marine Symposium 19th October

In 2019, Seasearch was again invited to present at the FSC Marine Symposium at Millport on Isle of Cumbrae. The event covered 2 days with an additional field course day which was not attended. Scotland coordinator Natalie Hirst presented a summary of Seasearch Scotland over the last 10 years of more unusual or rare records which we received.



RSPB Nature of Scotland Awards 4th December

Seasearch Scotland is extremely proud to have won in the "Coasts and Waters" category of the RSPB Nature of Scotland Awards 2019, which invited both freshwater and seawater projects and was a very popular category ahead of Year of Coasts and Waters 2020. The awards ceremony was attended by volunteers Sarah Bowen and Genine Keogh who accepted the award on behalf of Seasearch, along with MCS Scotland Marine Conservation coordinator and Seasearch member Calum Duncan.



Courses

Aquatron 9th March

An Observer course was held by both Scotland Coordinators Owen Paisley and Natalie Hirst, in Glasgow at the Aquatron dive centre in March. The course was very well attended with 15 participants from the dive centre club and other associated local ScotSac clubs.



St Abbs 13th/14th July

This year Seasearch again partnered with the Berwickshire Marine Reserve and the Eyemouth Hippodrome to deliver an Observer course in Eyemouth. The course was well attended with 10 participants and followed the standard format of a day in the classroom followed by a day of diving, not quite as planned from the shore due to bad weather but gratefully saved by Pentland Sub Aqua club who had spare places to offer us from a hard boat from St Abbs harbour.



Data

The Scotland 2019 dataset comprised a total of 12771 taxonomic records (not all identified to species). Priority Marine Feature (PMF) records (species and habitats/biotopes) are listed in the appendices, along with an indication of the general location and abundance where appropriate. The forms were combined into 463 discrete 'survey events', the locations of which are shown in the map on page 3.

Many Thanks

Seasearch would like to thank all volunteers, tutors and coordinators who have contributed to the 2019 dataset, training and events. I would also like to thank the skippers and crews of the local charters at Wreckspeditions, North East Dive, and Dive St Abbs, as well as the staff and volunteers at FSC Millport, Clyde Porpoise group and The Berwickshire Marine Reserve.

Appendix 1 – Priority Marine Feature (PMF) species records

There were a total of 139 records of PMF species in Scotland submitted during 2019:

PMF Name	Species Name	Number of records in 2019	SACFORN	General Location
Ocean quahog	<i>Arctica islandica</i>	3	R, R, R	Loch Creran (SW19/047), Loch Sunart (SW19/124, SW19/157)
Common skate	<i>Dipturus sp.</i>	1	R	Loch Sunart (SW19/167)
Common skate	<i>Dipturus intermedius</i>	2	R, R	Summer Isles and Loch Broom (SW19/135, SW19/140)
Cod	<i>Gadus morhua</i>	24	R, O, R, R, R, R, R, O, R, R, R, O, R, R, R, C, R, O, R, R, R, O, O, R	Loch Fyne (SC19/128) Loch Long/Loch Goil (SW19/185, SW19/184, SW19/177, SW19/178, SC19/089) Loch Linnhe/Loch Leven (SC19/012, SW19/187, SW19/206) Eyemouth & St Abbs (SC19/028, SC19/038, SC19/037, SC19/062, SC19/061, SC19/065) Outer Hebrides (NT19/081) Skye (SC19/124) Moray Firth (SC19/010, SC19/017) Small Isles (SC19/057) Summer Isles and Loch Broom (SW19/147, SW19/138, SW19/205) Catterline (SC19/063)
Grey seal	<i>Halichoerus grypus</i>	6	R, R, R, R, R, R	Firth of Forth (SC19/039) Scapa Flow (NT19/185, NT19/185) North-West Scotland (NT19/161, NT19/162, NT19/163)
Northern feather star	<i>Leptometra celtica</i>	25	R, O, R, A, C, R, C, F, O, C, R, R, O, C, C, C, P, C, C, C, O, O, O, O, O	Kinlochbervie (SC19/103) Kerrera Sound (SW19/088)

PMF Name	Species Name	Number of records in 2019	SACFORN	General Location
				Loch Sunart (SW19/156, SW19/159, SW19/159, SW19/164, SW19/164, SW19/166, SW19/166, SW19/167) Loch Craignish (SW19/096, SW19/096) North-West Scotland (NT19/161, NT19/162, NT19/165, NT19/166, NT19/168, NT19/167, NT19/170, NT19/171, NT19/172) Summer Isles and Loch Broom (SC19/005, SC19/001, SC19/002, SC19/002)
Anglerfish	<i>Lophius piscatorius</i>	3	R, R, R	Outer Hebrides (SW19/030) Skye (SC19/048) North-West Scotland (NT19/170)
Ling	<i>Molva molva</i>	11	R, R, R, R, R, R, R, R, R, R, R	Kinlochbervie (SW19/103, SW19/104) Loch Linnhe/Loch Leven (NT19/173) Eyemouth & St Abbs (SC19/038) Loch Sunart (SW19/189) Firth of Forth (SC19/039) Skye (SC19/050) North-West Scotland (NT19/165, NT19/166, NT19/167, NT19/170)
Native oyster	<i>Ostrea edulis</i>	4	R, R, R, F	Loch Creran (SW19/176, SW19/151) Loch Sunart (SW19/129) Loch Ryan (SW19/083)
European spiny lobster	<i>Palinurus elephas</i>	12	R, R, R, R, R, R, R, R, R, R, R, R	Kinlochbervie (SC19/109, SC19/122, SW19/108) Outer Hebrides (NT19/081) Skye (SC19/050, SC19/046, SC19/045, SC19/055) Small Isles (SC19/054, SC19/057, SC19/058)
White cluster anemone	<i>Parazoanthus anguicomus</i>	4	C, O, C, R	Kerrera Sound (SW19/087) Loch Sunart (SC19/033)

PMF Name	Species Name	Number of records in 2019	SACFORN	General Location
				Outer Hebrides (NT19/084) Skye (SC19/055)
Saithe	<i>Pollachius virens</i>	16	F, R, O, O, O, C, F, F, C, F, O, R, A, C, F, O	Loch Fyne (SW19/084, SW19/190) Eyemouth & St Abbs (SC19/028, SC19/060) Sound of Mull (SW19/042) Skye (SC19/050, SC19/046, SC19/046, SC19/045, SC19/074) Loch Craignish (SW19/098, SW19/096) Small Isles (SC19/054, SC19/058) Summer Isles and Loch Broom (SW19/138, SW19/141)
Sand goby	<i>Pomatoschistus minutus</i>	13	O, O, O, O, O, O, O, C, C, F, F, O, O, O	Loch Fyne (SW19/186, SW19/191, SC19/056) Loch Creran (SW19/193) Loch Melfort (SW19/199) Loch Long/Loch Goil (SW19/184, SC19/092, SC19/067) Kerrera Sound (SW19/198, SW19/198) Loch Linnhe/Loch Leven (SW19/196, SW19/187) Loch Sunart (SW19/170)
Spiny dogfish	<i>Squalus acanthias</i>	4	R, R, R, R	Loch Etive (SC19/126, SC19/125) Skye (SC19/088, SC19/074)
Northern sea fan	<i>Swiftia pallida</i>	11	O, R, R, R, R, R, O, F, O, F, F	Kinlochbervie (SC19/115) Loch Sunart (SC19/033, SW19/156, SW19/159, SW19/159, SW19/162) Sound of Mull (SC19/035) Skye (SC19/055) Loch Craignish (SW19/096) Small Isles (SC19/057, SC19/058)

Appendix 2 – Priority Marine Feature (PMF) biotope records

There were a total of 97 records of PMF biotopes in Scotland submitted during 2019:

PMF name	Biotope Code	Biotope description	Number of records in 2019	General location
Northern sea fan and sponge communities	CR.MCR.EcCr.CarSwi	<i>Caryophyllia smithii</i> and <i>Swiftia pallida</i> on circalittoral rock	1	Small Isles (SC19/058)
Kelp beds	IR.HIR.KFaR.LhypR	<i>Laminaria hyperborea</i> with dense foliose red seaweeds on exposed infralittoral rock	1	Outer Hebrides (SW19/032)
Low or variable salinity habitats	IR.LIR.Lag	Submerged fucoids, green or red seaweeds (low salinity infralittoral rock)	35	Loch Creran (SW19/175, NT19/181, SW19/212, SW19/151) Loch Fyne (SW19/186, SW19/191, SW19/197, SW19/008, SW19/007, SW19/082, SW19/081, SW19/105, SW19/148) Loch Melfort (SW19/089, SW19/150) Loch Sunart (SW19/195, SW19/171, SW19/189) Loch Linnhe/Loch Leven (SW19/196, SW19/112, SW19/187, SW19/206, NT19/180, SC19/129) Loch Long/Loch Goil (SW19/001, SW19/066, SW19/067, SW19/185, SW19/184, SC19/092, SC19/067) Seil Sound (SW19/113) Skye (SC19/079) Summer Isles and Loch Broom (SW19/029, SW19/146)

PMF name	Biotope Code	Biotope description	Number of records in 2019	General location
Kelp beds	IR.MIR.KR.LhypT	<i>Laminaria hyperborea</i> on tide-swept, infralittoral rock	2	Loch Sunart (SW19/152, SW19/152)
Kelp beds	IR.MIR.KR.LhypTX	<i>Laminaria hyperborea</i> on tide-swept infralittoral mixed substrata	1	Arran (NT19/242)
Horse mussel beds	SS.SBR.SMus.ModHAs	<i>Modiolus modiolus</i> beds with fine hydroids and large solitary ascidians on very sheltered circalittoral mixed substrata	6	Loch Creran (SW19/193, SW19/176, SW19/174) Loch Long/Loch Goil (SC19/042, SC19/024, SW19/177)
Horse mussel beds	SS.SBR.SMus.ModT	<i>Modiolus modiolus</i> beds with hydroids and red seaweeds on tide-swept circalittoral mixed substrata	1	Loch Creran (SW19/175)
Maerl or coarse shell gravel with burrowing sea cucumbers	SS.SCS.CCS.Nmix	<i>Neopentadactyla mixta</i> in circalittoral shell gravel or coarse sand	4	Outer Hebrides (NT19/080) Summer Isles and Loch Broom (SW19/004, SC19/005, SC19/003)
Kelp and seaweed communities on sublittoral sediment	SS.SMp.KSwSS	Kelp and seaweed communities on sublittoral sediment	8	Cumbræ and Portencross (SC19/051, SC19/052) Loch Carron (SC19/082) Loch Craignish (SW19/098, SW19/100) Loch Long/Loch Goil (SC19/024) Summer Isles and Loch Broom (SW19/109, SW19/146)
Maerl beds	SS.SMp.Mrl	Maerl beds	8	Skye (SC19/084) Summer Isles and Loch Broom (SW19/002, SW19/004, SW19/005, SW19/136, SW19/135, SW19/140, SW19/205)

PMF name	Biotope Code	Biotope description	Number of records in 2019	General location
Seagrass beds	SS.SMp.SSgr.Zmar	<i>Zostera marina/angustifolia</i> beds on lower shore or infralittoral clean or muddy sand	4	Arran (NT19/242) Loch Craignish (SW19/097, SW19/098) Skye (SC19/084)
Burrowed mud	SS.SMu.CFiMu.SpnMeg	Seapens and burrowing megafauna in circalittoral fine mud	19	Cumbræ and Portencross (SC19/073) Kerrera Sound (SW19/087) Loch Fyne (SW19/197, SC19/056, SW19/008, SW19/007, SW19/046, SW19/082, SW19/081, SW19/111, SW19/105, SC19/128) Loch Linnhe/Loch Leven (SC19/014, SC19/013) Loch Long/Loch Goil (SC19/042, SC19/044, SW19/177) Skye (SC19/083, SC19/071)
Flame shell beds	SS.SMx.IMx.Lim	<i>Limaria hians</i> beds in tide-swept sublittoral muddy mixed sediment	6	Loch Carron (SC19/082) Loch Sunart (SW19/194, SW19/116, SW19/156) Loch Linnhe/Loch Leven (SC19/129) Summer Isles and Loch Broom (SW19/136)
Native oysters	SS.SMx.IMx.Ost	<i>Ostrea edulis</i> beds on shallow sublittoral muddy mixed sediment	1	Loch Ryan (SW19/083)