1 20 DONE

SEASEARCH SURVEY FORM

Form No (leave blank) SW18-128

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

seasearch
www.seasearch.org.uk

Validated by OP Date 7/11/18 Entered by Date MR Reference

Recorder leave blank - for Seasearch use

Your details

[redacted]

Dive/Site details

Site name Ullapool Boat Yard - Loch Broom

General location
Wester Ross - Highland Region

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	0	.	0	.	
For drift dives From	57°	52.637	05°	07.231	W
To	0	.	0	.	

Or OS Grid Reference

Position derived from: (circle) GPS Chart OS map Web mapping

GPS Datum (circle) WGS84 OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☑ v sheltered ☐ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☑ v. weak ☐

Date of dive: 27 dd / 09 mm / 18 yy

Start of dive: 15:16 (24hr)

Dive duration: 56 (mins)

Sea temperature: 12 °c

Underwater visibility: 6 m

Drift dive? yes (no)

Night dive? yes (no)

Did you or your buddy take any of the following?

photographs (yes) / no

video footage (yes) / no

specimens yes (no)

seaweeds for pressing yes (no)

For the area surveyed, what was

the shallowest depth? (m) 4.0 bsl ☐ bcd

the deepest depth? (m) 24.7 bsl ☐ bcd

Tidal correction to chart datum ☐ m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

a) Boulders in shallows (~3-4m) leading to coarse sand silt slope with scattered cobble/small boulders - with low 'wall' of large boulders in centre of site. Flame shell beds aggregating larger sediment and debris 9-25m

b) Flame shells c) Fishing trash, bottles, cans

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Rock: Boulders in shallows and low rock wall / bedrock leading down slope to ~ 11-12 m in centre of beach. Scattered boulders on slope below.

Biotope Code

Seabed type: rock ☑ boulders ☑ cobbles ☑ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☑ other

Communities: kelp forest ☐ kelp park ☑ mixed seaweeds ☑ seagrass bed ☐ enc pink algae ☑

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

Coarse sand / gravel / shell slope ~~base~~ extended to max depth.

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☑ sand ☑ mud ☑ wreckage ☐ other

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☑ barren sediment ☐

3. DESCRIPTION (physical + community)

Flame shell beds from 9m - 25m (max depth surveyed)
These seem to be aggregating the largest sediment on the slope - pebbles / shell / gravel as well as fine.

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☑ gravel ☑ sand ☑ mud ☐ wreckage ☐ other

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☑

animal turf Limaria hians animal bed ☐ sediment with life ☑ barren sediment ☐

Rock Sand Plume

1	2	3	DEPTH LIMITS (m)
4.0	4.0	9.0	Upper (from sea level) (i.e. minimum)
9.0	24.7	24.7	Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

%			SUBSTRATUM
			Bedrock type?:
10			Boulders - very large > 1.0 m
20			- large 0.5 - 1.0 m
10			- small 0.25 - 0.5 m
10			Cobbles (fist - head size)
		25	Pebbles (50p - fist size)
	30	25	Gravel - stone
	25	25	- shell fragments
	25	25	Sand - coarse
	15		- medium
			- fine
			Mud
			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
			Other (state)
100	100	100	Total

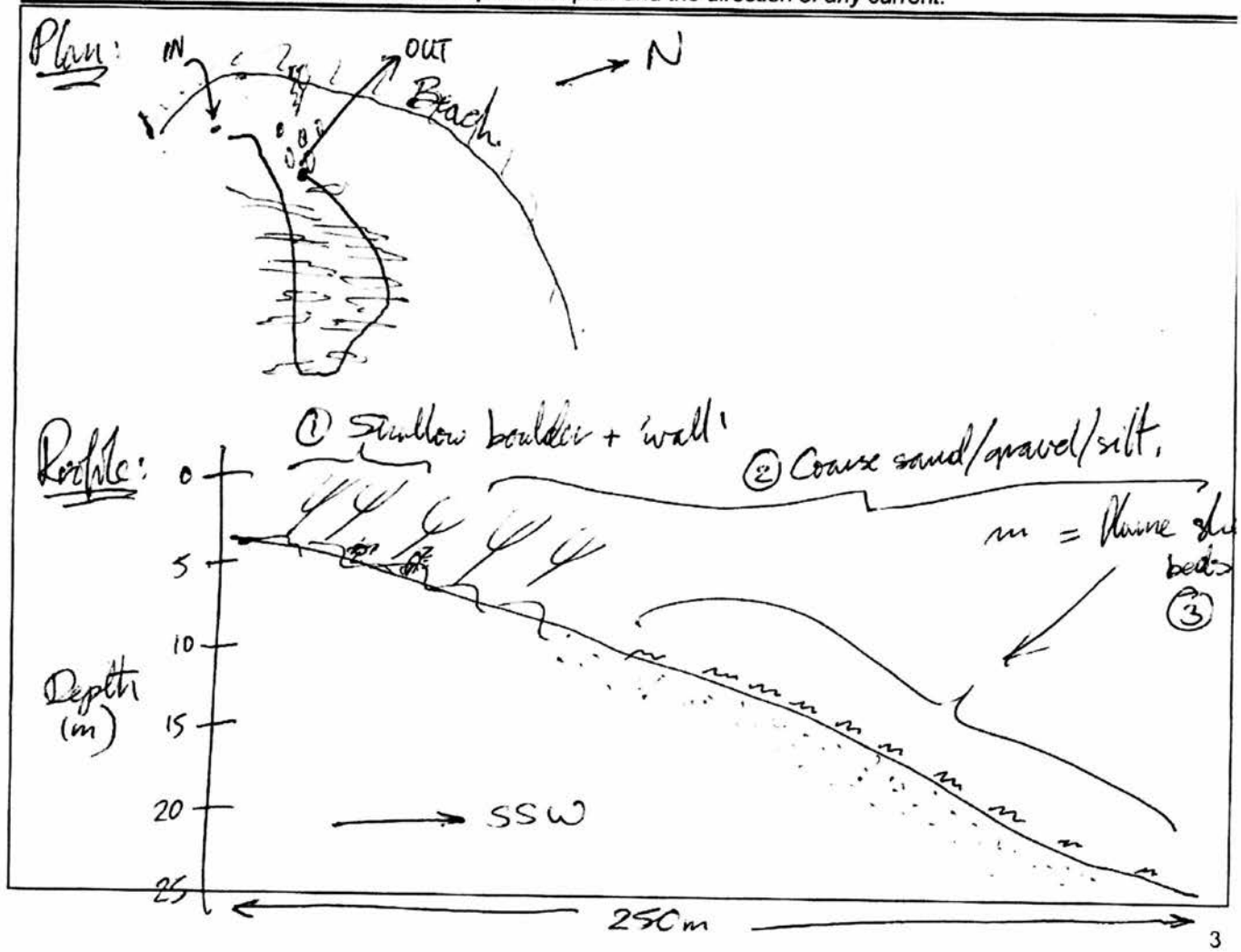
1	2	3	FEATURES - ROCK (all categories) (1-5)
2			Relief of habitat (even - rugged)
2			Texture (smooth - pitted)
1			Stability (stable - mobile)
1			Scour (none - scoured)
2			Silt (none - silted)
3			Fissures > 10 mm (none - many)
2			Crevices < 10 mm (none - many)
2			Boulder/cobble/pebble shape (rounded - angular)
✓			Sediment on rock? (tick if present)

✓			FEATURES – SEDIMENT (1)
	✓		Mounds / casts
	✓	✓	Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

1-5			FEATURES – SEDIMENT (2)
	3	2	Firmness (firm - soft)
	4	3	Stability (stable - mobile)
	3	3	Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

	ph	1 (Rock)	2 (Sand)	3 (Flat)
sponges				
Amphilectus fucorum	✓	O		
Mashed potato Sponge?	✓			R
cnidarians: hydroids, anemones, corals,				
Nemertesia ramosa	✓		O	O
Alcyonium digitatum	✓	R		
Nemertesia antennina	✓		O	O
Halopteris catharina	✓			R
worms				
Spirobranchus	✓	F	F	
Lanice conchilega	✓		O	
Lineus longissimus	✓		R	
crustaceans Inachus Sp	✓			O
Himinurus gammarus	X	R		
Cancer pagurus	X	O		
Nicora gibbosa	✓		C	C
Pagurus bernhardus	✓	F		O
Pagurus sp.	✓	C	C	O
Mytilocaccia sp	✓		C	O
Munida rugosa	✓		O	F
Carcinus maenas	✓	F	O	
molluscs				
Calliostoma zizyphinum	X	R		
Limaria hians	✓			F
Aequipecten opercularis	✓		R	
Pecten maximus	✓		O	
Buccinum undatum			R	
Gibbula umbilicalis	✓	R		
bryozoans				
Membranacea membranacea	✓	O		
Schizomavella linearis	✓	O F		

	ph	1 (Rock)	2 (Sand)	3 (Mar)
echinoderms				
Antedon bifida	✓	C	C	C
Echinus esculentus	✓		C	C
Marthasterias glacialis	✓		O	C
Solaster endica	✓			R
Crossaster papposus	✓		O	O
Asterias rubens	✓		O	
Asthropecten irregularis	✓		R	
Henricia Sp	✓			R
Amphiura Sp	✓			R
sea squirts				
Ascidia mentula	✓	O		
Corella parallelogramma	✓			R
fishes				
Conger conger	✓	R		
Callionymus lyra	✓	C		
Chelidonichthys cuculus	✓		R	R
Trisopterus luscus	✓		O	C
Gadus morhua	✓		O	
Callionymus lyra	✓		R	
seaweeds				
Laminaria hyperborea	✓	C		
Chorda filum	✓	C		
Ecklonia serratus	✓	F		
Pink encrusting algae	✓	C	F	F
other or continuations				
Liocarcinus depurator	✓		O	
Porania pulvillus	✓	R		
Asparechinus miliaris	✓		O	

Continue on a separate sheet if you need to

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

21 DONE

SEASEARCH SURVEY FORM

Form No (leave blank) SW18-127

seasearch
www.seasearch.org.uk

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

Validated by | Date | Entered by | Date | MR Reference

Recorder leave blank - for Seasearch use

[redacted]

Dive/Site details

Site name: ~~Dangerous fishing pier~~ BARDENTARBAT PIER

General location: 400m beyond Polbain North side BARDENTARBAT BAY POLBAIN, WESTER ROSS,

Date of dive: 28 dd / 07 mm / 18 yy

Start of dive: 11 : 13 (24hr)

Dive duration: 60 (mins)

Sea temperature: 12 °c

Underwater visibility: 10+ m

Drift dive? yes / **no** (circled)

Night dive? yes / **no** (circled)

Position (degrees and decimal minutes – state if in any other format)

	Latitude	Longitude	W or E
Centre of site	° .	° .	
For drift dives From	58° 01.773	05° 22.479	W
To	58° 01.742	05° 22.639	W

Or OS Grid Reference

Position derived from: (circle) GPS Chart OS map **Web mapping** (circled)

GPS Datum (circle) **WGS84** (circled) OSGB36

Did you or your buddy take any of the following?

- photographs: **yes** (circled) / no
- video footage: yes / **no** (circled)
- specimens: yes / **no** (circled)
- seaweeds for pressing: yes / **no** (circled)

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☐ v sheltered ☐ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☐ v. weak ☐

For the area surveyed, what was

- the shallowest depth? (m) 1.0 bsl ☐ bcd
- the deepest depth? (m) 10.6 bsl ☐ bcd
- Tidal correction to chart datum ☐ m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

a) Disused concrete and steel pier at boulder slope shore running down to very gently sloping coarse sand.

b) –

c) evidence of Scallop fishing; lost lobster pot, mixed heavy rubbish

SS1 01/14

Ulla → 12 m Bugleman Attybay NT Conf (on RH) Fod AB35 RAC

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Steel and crumbling concrete pier structure, and nearby fishing winch/lifting debris. Forming shelter for fish and well encrusted below low tide. Rich in seaweed inc kelp.

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☑ mixed seaweeds ☑ seagrass bed ☐ enc pink algae ☑

animal turf barnacle/mussel animal bed ☐ sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

Slope of huge boulders with dense kelp cover.

Biotope Code

Seabed type: rock ☐ boulders ☑ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☑ kelp park ☑ mixed seaweeds ☑ seagrass bed ☐ enc pink algae ☑

animal turf mixed animal bed ☐ sediment with life ☐ barren sediment ☐

3. DESCRIPTION (physical + community)

Course pale sand - sediment with worm and burrowing anemones, echinoderms.

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

Wreck Rock Sand

1	2	3	
	m		**DEPTH LIMITS**
1·0	2·0	3·0	Upper (from sea level) (i.e. minimum)
6·5 ~~6·6~~	8·0	10·6	Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
			Bedrock type?:
	10		Boulders - very large > 1.0 m
	40		- large 0.5 - 1.0 m
	30		- small 0.25 - 0.5 m
	20		Cobbles (fist - head size)
			Pebbles (50p - fist size)
			Gravel - stone
		50	- shell fragments
		30	Sand - coarse
		20	- medium
			- fine
			Mud
			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
80			- concrete
			- wood
20			Other (state) Steel
100	100	100	**Total**

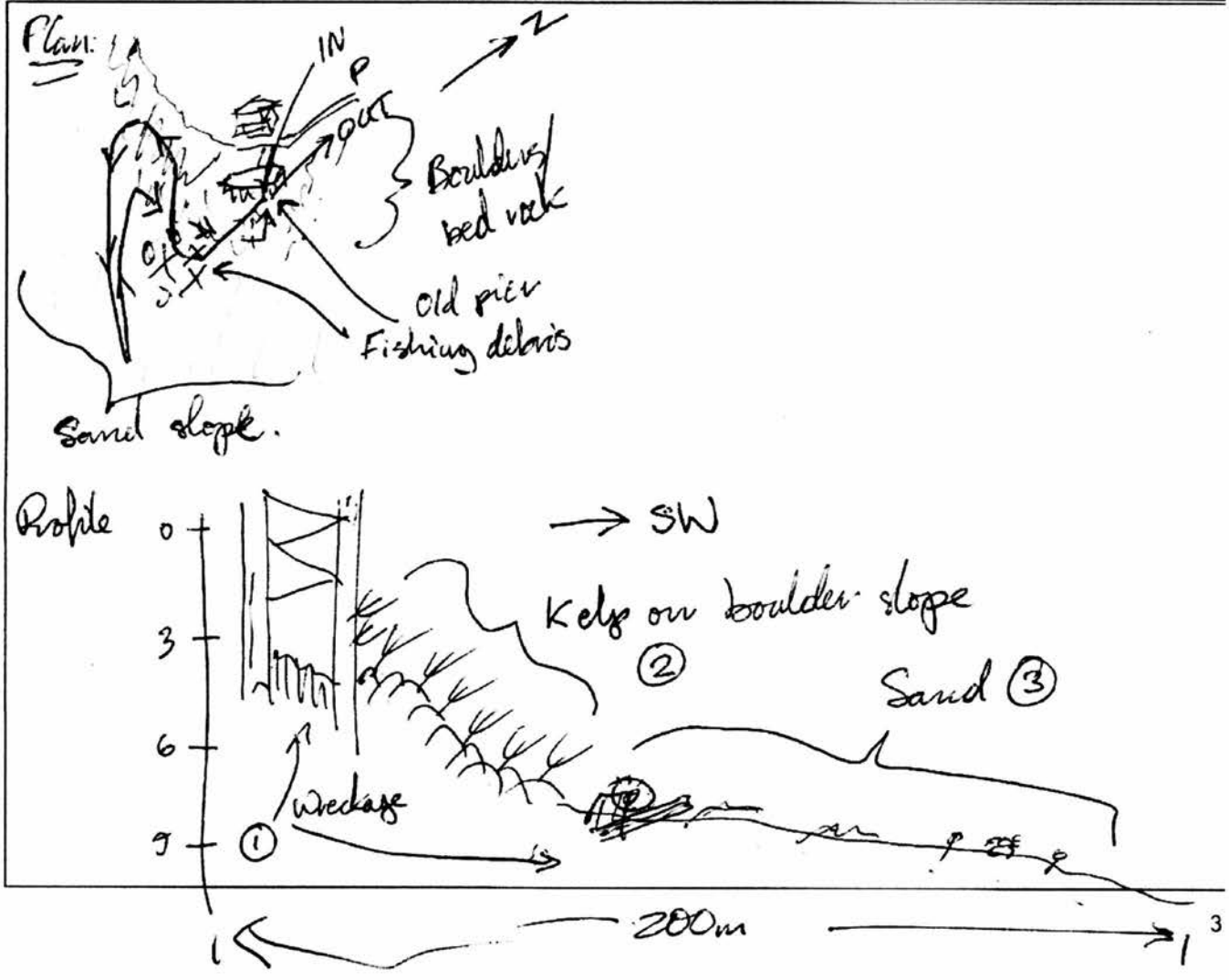
1	2	3	
	1-5		**FEATURES - ROCK (all categories)**
	3		Relief of habitat (even - rugged)
	1		Texture (smooth - pitted)
	2		Stability (stable - mobile)
	2		Scour (none - scoured)
	1		Silt (none - silted)
	4		Fissures > 10 mm (none - many)
	4		Crevices < 10 mm (none - many)
	3		Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
			Mounds / casts
			Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

	1-5		**FEATURES – SEDIMENT (2)**
		2	Firmness (firm - soft)
		2	Stability (stable - mobile)
		4	Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

	ph	Wreck 1	Boulder 2	Sand 3
sponges				
cnidarians: hydroids, anemones, corals,				
Urticina felina	✓	R		
Obelia geniculata	✓	F	F	
Cyanea lamarckii	✓		R	
Cerianthus lloydii	✓			O
Stalked jelly	✓		O	O
worms				
~~Spirorbis sp~~	✓	~~C~~	~~C~~	F
Circeis spirillum	✓	C	C	F
crustaceans				
Cancer pagurus	✓	O		O
Necora puber	✓	O	O	
Carcinus maenas	✓	O		
Macropodia Sp	✓		R	
Galathea squamifera	✓		O	
Pagurus Sp	✓		O	
Liocarcinus depurator	✓			R
Cirripedia sp	✓	C		
molluscs				
Mytilus edulis	✓	C		
Gibbula magus	✓		O	O
Calliostoma zizyphinum	✓		R	
Lacuna vincta	✓		O	
Aequipecten opercularis	✓		R	
bryozoans				
Membranipora membranacea	✓	F	F	
Schizomavella linearis	✓		F	

	ph	Wreck 1	Boulder 2	Sand 3
echinoderms				
Echinus esculentus	✓	O	F	R
Manthoasterias glacialis	✓			O
Asterias rubens	✓	O	O	O
Astropecten irregularis	✓			R
Henricia Sp	✓	R		
sea squirts				
Ascidia aspersa	✓			F
Boltenia echinata	✓		O	
fishes				
Pollachius pollachius	✓	F		
Pollachius virens	✓			F
Myoxocephalus scorpius	✓			R
Gobiusculus flavescens	✓		O	
seaweeds				
Laminaria hyperborea	✓	C	C	
Saccharina latissima	✓	O	F	F
Fucus serratus	✓	O		
Ulva lactuca	✓	F		F
Pink encrusting algae	✓	F	C	
Mixed red	✓	C	C	
Palmaria palmata	✓	O		
Chorda filum	✓			O
Alaria esculenta	✓		C	
Red encrusting algae	✓		F	
other or continuations				
Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

Thank you for completing this form

Please save the form, then email it to one of the following people:

- the Seasearch coordinator for the area where the dive took place
- the dive organiser
- the National Seasearch Coordinator at info@seasearch.org.uk

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. It will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public. If you do not agree with this use of the data do not submit the form.

for Seasearch use only	validated by	O.P	date	7/11/18
	entered by		date	
	MarRec No			

Seasearch
Marine Conservation Society
Over Ross House, Ross Park
Ross-on-Wye
Herefordshire
HR9 7QQ

seasearch
www.seasearch.org.uk

Seasearch is a joint project co-ordinated by the Marine Conservation Society and supported by: The Wildlife Trusts, Natural England, Countryside Council for Wales, Scottish Natural Heritage, DOE Northern Ireland, Joint Nature Conservation Committee, Environment Agency, Marine Biological Association, British Sub-Aqua Club, Professional Association of Diving Instructors, Scottish Sub-Aqua Club, Sub-Aqua Association, Irish Underwater Council and the Nautical Archaeology Society.

Record no (recorder leave blank) SWIF-126

Seasearch Observation Form

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This form asks for two types of information from your dive - **what the seabed was like** and **what marine life you saw.** Please read the guidance notes before completing the form. By completing this form you will be adding to our knowledge of the marine environment - helping it to remain fit for life!

[redacted]

Site Name South end of Eilean Fada Mór	**Date of Dive** 23/09/2018 **Start of dive** 14:16 (24hr) **Dive duration** 40 (mins)
General Location (inc county) Summer Isles, Highland Region, Scotland	**Max depth of survey** 8 m **Sea Temperature** 11·7 °C **U/W visibility** 10 m

Position at start of dive (degrees & decimal minutes only) **or OS Grid Reference**

58° → [redacted]° 00.492 N 5° 25.771 W or E W

2 letters (1 in Ireland), 6 numbers

Position at end of dive (if different only)

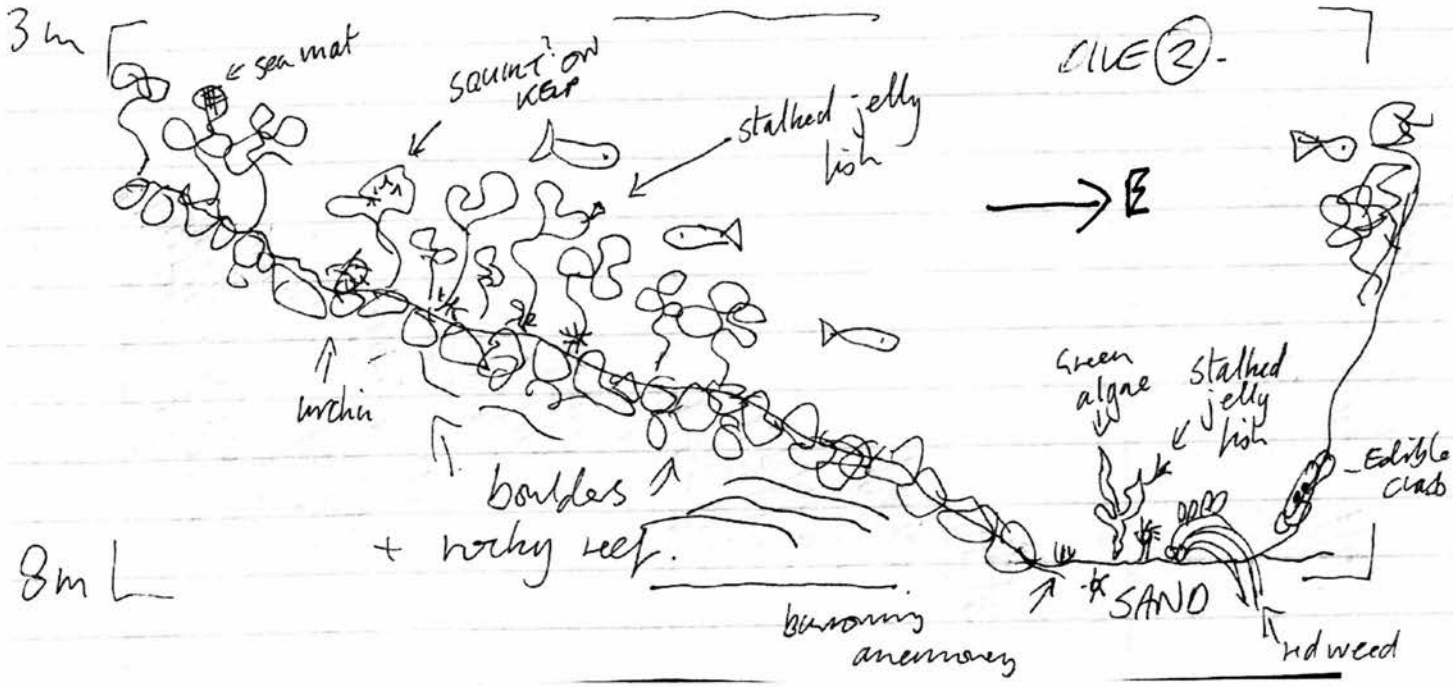
° N ° W or E W

Position derived from (select one)
GPS ○ Chart ○ OS Map ○
Web mapping site ○

Drift dive? ☐
Night dive? ☐

Did you take any photographs? ☑ **or video footage?** ☑

SO digital v2.1 160210



Types of seabed present: (please select all that you saw and click the button next to the dominant one)

Rocky Reef	Boulders	Cobbles and Pebbles	Mixed Ground	Sand and Gravel	Mud	Wreckage	Other
☑ ○	☑ ◉	☐ ○	☐ ○	☑ ○	☐ ○	☐ ○	☐ ○

Did you notice anything unusual or noteworthy about the seabed or the marine life? (Max. 90 characters)

No

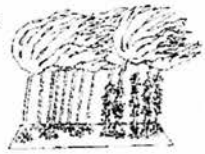
Was there any litter or were there any man-made objects apparent? (Max. 90 characters)

No

What marine life did you see on your dive?

Seabed cover types (tick all those present)

Kelp forest ☐



Kelp park ☑

Mixed seaweeds ☑

Seagrass Bed ☐

Encrusting pink algae ☑

Other - specify ☐ _____

Animal turf on rocks

Short ☐

Tall ☐

Animal Beds
(e.g. mussels, brittlestars, scallops - state which)

☐ _____

Sediment with life apparent
(tubes, burrows etc)

☐

Barren sediment
(no life or structures apparent)

☐

Species you saw

Show abundance of each species as **R**are, **O**ccasional, **C**ommon, or if you're unsure, **P**resent.

Species		R O C or P
Astropecten irregularis	R	☐
Echinus esculentus	C	☑
Saccorihiza polyschides	C	☑
Membranipora membranacea	C	☑
Lithothamnion sp./ Phymatolithon sp.	C	☑
Cyanea capillata	R	☐
Corella parallelogramma	O	☑
Botryllus schlosseri (?) blue with yellow edge.	O	☑
Red algae/weed	O	☑
Stauromedusae sp	O	☑
Green algae	R	☐
Cerianthus lloydii	R	☐
Ensis magnus	O	☑
Cancer pagurus	O	☑
Ascidiella aspersa	O	☑
Marbled swimming crab	R	☐
Dead/white maerl	O	☑
Pomatoceros & Spirorbis sp.	R	☐
Lanice conchilega	R	☐

Illustrations by Bob Foster-Smith

23/09/2018
Dive 2
Species cont.

SW18 – 126
(2 of 2)

~~Saccorhiza polyschides~~	~~C~~
Corella parallelogramma	O
Ophiura albida	R
Clear, fairly flat sponge/compound (?) squirt? Attached to kelp in various of my pictures. Transparent with inlets/outlets.	O
Nucella lapillus (Dog Whelk)?? - ~~this is the tiny wee stripy shells on the~~ kelp in my photos - Lacuna vincta	O
Liocarcinus depurator	O
Electra pilosa	R
Chaetopterus variopedatus	R
Urticina felina	R
Plankton (string with pink blobs) Salpa fusiformis !	R

Thank you for completing this form

Please save the form, then email it to one of the following people:

- the Seasearch coordinator for the area where the dive took place
- the dive organiser
- the National Seasearch Coordinator at info@seasearch.org.uk

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. It will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public. If you do not agree with this use of the data do not submit the form.

for Seasearch use only	validated by	O.P.	date	6/11/18
	entered by		date	
	MarRec No			

Seasearch
Marine Conservation Society
Over Ross House, Ross Park
Ross- on- Wye
Herefordshire
HR9 7QQ

seasearch
www.seasearch.org.uk

Seasearch is a joint project co-ordinated by the Marine Conservation Society and supported by: The Wildlife Trusts, Natural England, Countryside Council for Wales, Scottish Natural Heritage, DOE Northern Ireland, Joint Nature Conservation Committee, Environment Agency, Marine Biological Association, British Sub-Aqua Club, Professional Association of Diving Instructors, Scottish Sub-Aqua Club, Sub-Aqua Association, Irish Underwater Council and the Nautical Archaeology Society.

Record no (recorder leave blank) SWIS-125

Seasearch Observation Form

seasearch
www.seasearch.org.uk

This form asks for two types of information from your dive - **what the seabed was like** and **what marine life you saw.** Please read the guidance notes before completing the form. By completing this form you will be adding to our knowledge of the marine environment - helping it to remain fit for life!

[redacted]

Site Name	Date of Dive	23/09/2018
S.E. Tanera Beg	Start of dive	10:20 (24hr)
	Dive duration	40 (mins)
General Location (inc county)	Max depth of survey	16 m
Summer Isles, Highland Region, Scotland	Sea Temperature	11·7 °C
	U/W visibility	10 m

Position at start of dive (degrees & decimal minutes only) **or OS Grid Reference**

58° [redacted]° 00.328 N 5° 26.197 W or E W

2 letters (1 in Ireland), 6 numbers

Position at end of dive (if different only)

° N ° W or E W

Position derived from (select one)

GPS ● Chart ○ OS Map ○ Web mapping site ○

Drift dive? ☐ Night dive? ☐

Did you take any photographs? ☑ or video footage? ☑

Types of seabed present: (please select all that you saw and click the button next to the dominant one)

Rocky Reef	Boulders	Cobbles and Pebbles	Mixed Ground	Sand and Gravel	Mud	Wreckage	Other
✓ ●	✓ ○	☐ ○	☐ ○	✓ ○	☐ ○	☐ ○	☐ ○

Did you notice anything unusual or noteworthy about the seabed or the marine life? (Max. 90 characters)

No.

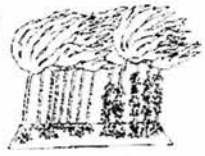
Was there any litter or were there any man-made objects apparent? (Max. 90 characters)

No.

What marine life did you see on your dive?

Seabed cover types (tick all those present)

Kelp forest



☐

Kelp park

☑

Mixed seaweeds

☑

Seagrass Bed

☐

Encrusting pink algae

☑

Other - specify

☐ _____

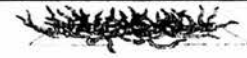
Animal turf on rocks

☐ **Short**

☐ **Tall**

Animal Beds
(e.g. mussels, brittlestars, scallops - state which)

☐ _____



Sediment with life apparent
(tubes, burrows etc)

☑

Barren sediment
(no life or structures apparent)

☐

Species you saw

Show abundance of each species as **R**are, **O**ccasional, **C**ommon, or if you're unsure, **P**resent.

Species		R O C or P
Laminaria Hyperborea	C	☑
Calliostoma zizyphinum	R	☐
Necora puber	O	☑
Stauromedusae sp.	R	☐
Lithothamnion sp/ Phymatolithon sp.	C	☑
Asterias rubens	O	☑
~~Aurelia aurita (juvs attached to kelp)~~	~~R~~	☐
Ascidiella sp. (aspersa or scabra?)	C	☐
Echinus esculentus	C	☑
Kelp stipe species	O	☑
Pollachius sp	O	☑
Hyas araneus	O	☑
Halidrys siliquosa	O	☑
Ensis ~~siliqua~~ (shells)	C	☑
Colonial sea squirt - pale blue (photos)	O	☑
Helcion pellucidum	R	☐
Cancer pagurus	O	☑
Antedon bifida	C	☑
Ciona intestinalis	C	☑
Membranipora membranacea	C	☑

Illustrations by Bob Foster-Smith

23/09/2018
Dive 1
Species cont.

SW18 - 125
(2) f (2)

Clear, fairly flat sponge/compound (?) squirt? Attached to kelp in various of my pictures. Transparent with inlets/outlets.	O
~~Nucella lapillus (Dog Whelk)~~?? - this is the tiny wee stripy shells on the kelp in my photos Lacuna vincta ?	O
Ludia ciliaris	R
Pagurus bernhadus	O
Marthasterias glacialis	O
Cerianthus lloydii	O
Macropodia sp.	R
Pollachius sp. (probably pollachius)	R

.....

Thank you for completing this form

Please save the form, then email it to one of the following people:

- the Seasearch coordinator for the area where the dive took place
- the dive organiser
- the National Seasearch Coordinator at info@seasearch.org.uk

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for Seasearch use only	validated by	QP	date	6/11/18
	entered by		date	
	MarRec No			

Seasearch
Marine Conservation Society
Over Ross House, Ross Park
Ross- on- Wye
Herefordshire
HR9 7QQ

seasearch
www.seasearch.org.uk

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Record no (recorder leave blank) SW18-124

Seasearch Observation Form

seasearch
www.seasearch.org.uk

This form asks for two types of information from your dive - **what the seabed was like** and **what marine life you saw.** Please read the guidance notes before completing the form. By completing this form you will be adding to our knowledge of the marine environment - helping it to remain fit for life!

[redacted]

Site Name	**Date of Dive**	22/09/2018
Ard-na-goine	**Start of dive**	12:11 (24hr)
	Dive duration	39 (mins)
General Location (inc county)	**Max depth of survey**	19 m
N of Tanera More Anchorage Summer Isles Highland Region	**Sea Temperature**	11.8 °C
	U/W visibility	10 m

58 →

Position at start of dive (degrees & decimal minutes only) — or OS Grid Reference

58° 00.963 N 05° 23.699 W or E W

2 letters (1 in Ireland), 6 numbers

Position at end of dive (if different only)

° N ° W or E W

Position derived from (select one)

GPS ◉ Chart ○ OS Map ○

Web mapping site ○

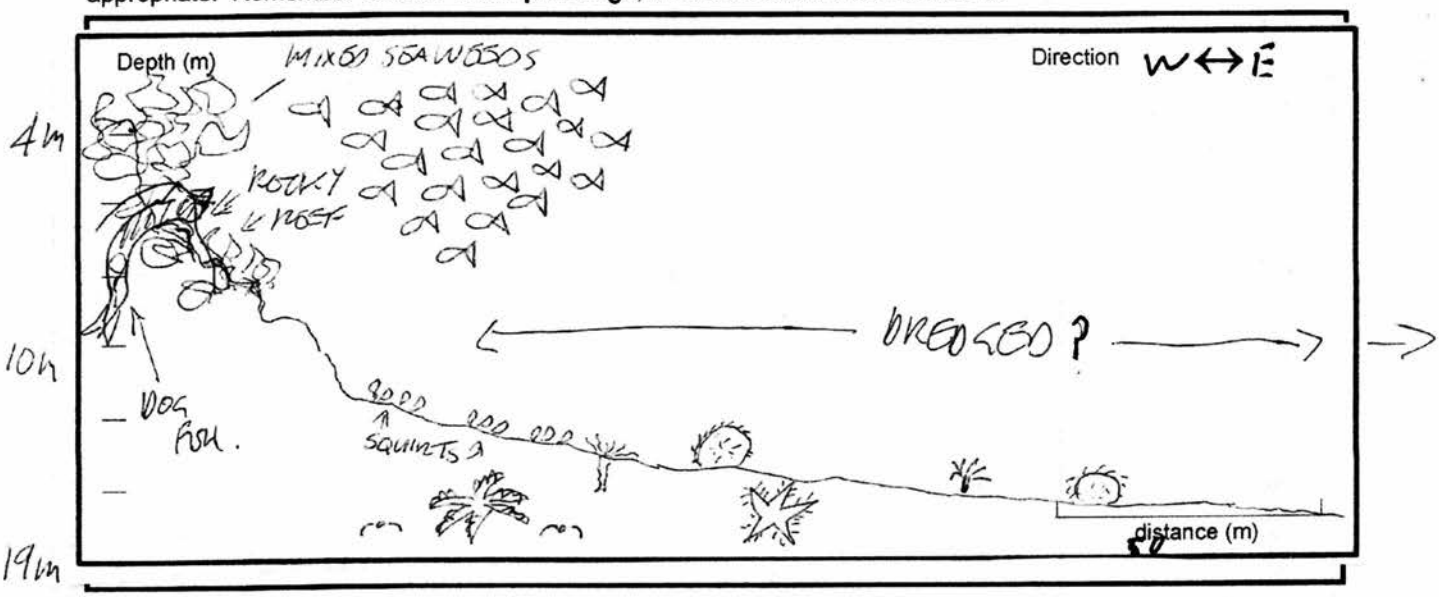
Drift dive? ☐

Night dive? ☐

Did you take any photographs? ☑ **or video footage?** ☑

SO digital v2.1 160210

Please insert an approximate profile of the seabed (i.e a side-on view), labelling features and dominant forms as appropriate. Remember to show the **depth range**, **direction** and a **distance scale**.



Types of seabed present: (please select all that you saw and click the button next to the dominant one)

Rocky Reef	Boulders	Cobbles and Pebbles	Mixed Ground	Sand and Gravel	Mud	Wreckage	Other
☑	☑	☐	☐	☑ ●	☐	☐	☐

Did you notice anything unusual or noteworthy about the seabed or the marine life? (Max. 90 characters)

Very close to the shore and just beyond the boulder-line it appeared that the sea bed had been dredged - between 10m and 19m.

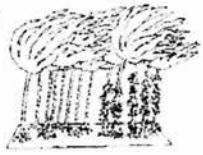
Was there any litter or were there any man-made objects apparent? (Max. 90 characters)

1 glass bottle.

What marine life did you see on your dive?

Seabed cover types (tick all those present)

Kelp forest ☐



Kelp park ☑

Mixed seaweeds ☑

Seagrass Bed ☐

Encrusting pink algae ☑

Other - specify ☐ _____

Animal turf on rocks

Short ☐

Tall ☐

Animal Beds
(e.g. mussels, brittlestars, scallops - state which)

☐ _____

Sediment with life apparent
(tubes, burrows etc)

☑

Barren sediment
(no life or structures apparent)

☐

Species you saw

Show abundance of each species as **R**are, **O**ccasional, **C**ommon, or if you're unsure, **P**resent.

Species		R O C or P
Inachus sp.	O	☑
Suberites camosus	R	☐
Corella parallelogramma	O	☑
Ascidiella aspersa	C	☑
Botryllus Schlosserei	O	☑
Cerianthus lloydii	C	☑
Nemertesia antenniana	O	☑
Marthasterias glacialis	O	☑
Echinus esculentus	O	☑
Pollachlus virens	C	☑
Lanice conchileya	O	☑
Pagurus bernhardus	O	☑
Cancer pagurus	O	☑
Liocarcinus depurator	O	☑
Decorator crab?	O	☑
Luidia Sarsi	R	☐
Asterias Rubens	R	☐
Porania pulvillus	O	☑
Pollachius virens	C	☑
Suberites sp. (on Hermit Crab shell)	R	☐

Illustrations by Bob Foster-Smith

Seasearch - Reiff - Hilary Mackay + David Moore -

22/09/2018

Species cont.

Liocarcinus depurator	O
Antedon bifida	O
Ascidiella aspersa	O
Aequipecten opercularis	R
Munida rugosa	R
Pecten maximus	R
Pomatoceros sp.	O
Laminaria Hyperborea	O

Thank you for completing this form

All that's left for you to do is to either hand it to the Dive Organiser or fold it into thirds along the dotted lines, tuck one part into the other, add a stamp and send it off.

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for Seasearch use only	validated by	D.P	date	30/10/18
	entered by		date	
	MarRec No			

first fold

Please affix stamp here

Seasearch
Marine Conservation Society
Over Ross House, Ross Park
Ross-on-Wye
Herefordshire
HR9 7QQ

second fold and tuck in

seasearch
www.seasearch.org.uk

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Record no (recorder leave blank) SWH-N23

Seasearch Observation Form

seasearch
www.seasearch.org.uk

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Please complete the following sections in a black pen and BLOCK CAPITALS

[redacted]

Site Name BADENTARBAT PIER	**Date of Dive** 28 / 9 / 18
	Start of dive 11:14 (24hr)
	Dive duration 52 (mins)
General Location (inc county) ACHILTIBUIE, WESTER ROSS HIGHLAND REGION	**Max depth of survey** 9 m
	Sea Temperature 12 °C
	UW visibility 15 m

Position at start of dive (degrees & decimal minutes only) **or OS Grid Reference**

58 ° 01 ~~.767~~ N 05 ° 22 .484 W or E

2 letters (1 in Ireland), 6 numbers

Position at end of dive (if different only)

° . N ° . W or E

Position derived from (circle)

GPS (Chart) OS Map Web mapping site

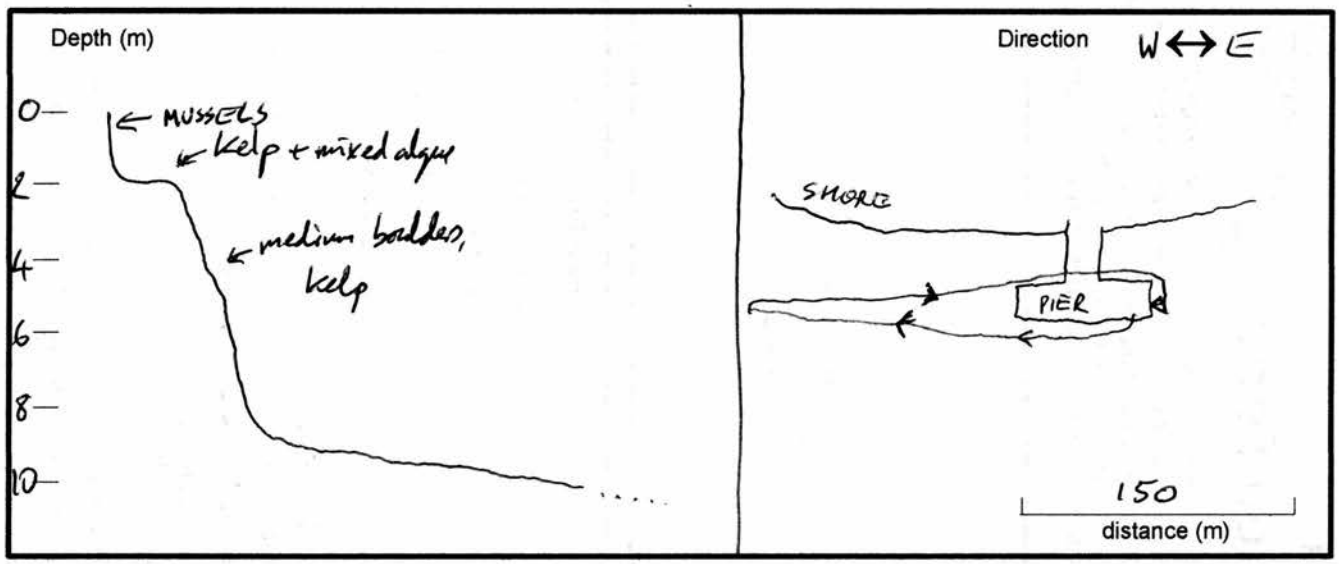
Drift dive? yes / (no)

Night dive? yes / (no)

Did you take any photographs? (yes) / no **or video footage?** (yes) / no

SO1-01/14

Description of the seabed
Please draw an approximate profile of the seabed (i.e. a side-on view), labelling features and dominant forms as appropriate. Remember to show the depth range, direction and a distance scale.



Types of seabed present: (please tick all that you saw and circle the dominant one)

Rocky Reef	Boulders	Cobbles and Pebbles	Mixed Ground	Sand and Gravel	Mud	Wreckage	Other
☑	☑	☑	☐	☑	☐	☑	☐

Did you notice anything unusual or noteworthy about the seabed or the marine life?

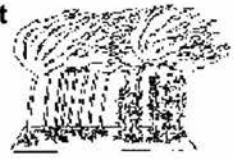
Was there any litter or were there any man-made objects apparent?

BOTTLES, BOAT PUMP, ROPE, ANGLING LURES

What marine life did you see on your dive?

Seabed cover types (tick all those present)

Kelp forest ☒



Kelp park ☑

Mixed seaweeds ☑

Seagrass Bed ☐

Encrusting pink algae ☒

Other - specify ☐

Animal turf on rocks

☐ **Short**

☐ **Tall**

Animal Beds
(e.g. mussels, brittlestars, scallops - state which)

☑ MUSSELS

Sediment with life apparent
(tubes, burrows etc) ☑

Barren sediment
(no life or structures apparent) ☐

Illustrations by Bob Foster-Smith

Species you saw
Show abundance of each species as **R**are, **O**ccasional, **C**ommon, or if you're unsure, **P**resent.

Species	R, O, C or P
MYTILUS EDULIS	O
LUIDIA CILIARIS	O
HYAS ARANEUS	R
CALLIOSTOMA ZIZYPHINUM	O
GIBBULA UMBILICALIS	O
GIBBULA CINEREA	O
MEMBRANIPORA MEMBRANACEA	C
ELECTRA PILOSA	C
ULVA LACTUCA	C
ULVA INTESTINALIS	O
PORPHYRA ~~UMBILICALIS~~ SPP.	O
LACUNA VINCTA	O
PHYLLOPHORA CRISPA	O
PLOCAMIUM CARTILAGINEUM	R
OBELIA GENICULATA	O
CELLARIA ~~FISTULOSA~~ SP	O
PALMARIA PALMATA	C
METRIDIUM SENILE	R
CARYOPHYLLIA SMITHII	O
BOTRYLLUS SCHLOSSERI	O

Thank you for completing this form

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for Seasearch use only	validated by	OP	date	30/10/14
	entered by		date	
	MarRec No			

first fold

Please affix stamp here

Seasearch
Marine Conservation Society
Over Ross House, Ross Park
Ross-on-Wye
Herefordshire
HR9 7QQ

second fold and tuck in

seasearch
www.seasearch.org.uk

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Record no (recorder leave blank) SW14122

Seasearch Observation Form

seasearch
www.seasearch.org.uk

This form asks for two types of information from your dive - **what the seabed was like** and **what marine life you saw.** Please read the guidance notes before completing the form. By completing this form you will be adding to our knowledge of the marine environment - helping it to remain fit for life!

Please complete the following sections in a black pen and BLOCK CAPITALS

[redacted]

Site Name BARDEN - TARBAT. BAY..	**Date of Dive** 28/9/18
	Start of dive 11 : 09 (24hr)
	Dive duration 44 (mins)
General Location (inc county) ACHILTIBUIE WESTER ROSS. HIGHLAND REGION	**Max depth of survey** 10.3 m
	Sea Temperature 11 °C
	UW visibility 15 m

Position at start of dive (degrees & decimal minutes only) **or OS Grid Reference**

58 ° 01 ~~.767~~ N 05 ° 22 .464 W or E

2 letters (1 in Ireland), 6 numbers

Position at end of dive (if different only)

° . N ° . W or E

Position derived from (circle)

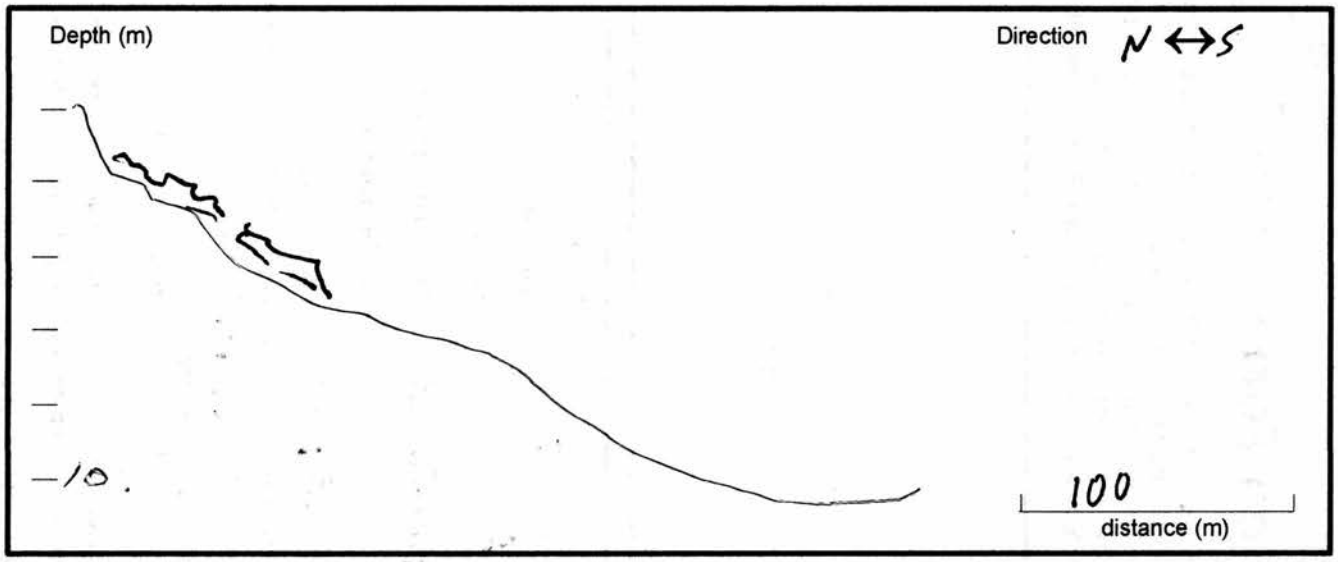
GPS (Chart) OS Map Web mapping site

Drift dive? ~~yes~~ / no

Night dive? ~~yes~~ / no

Did you take any photographs? yes / ~~no~~ **or video footage?** yes / ~~no~~

Description of the seabed
Please draw an approximate profile of the seabed (i.e. a side-on view), labelling features and dominant forms as appropriate. Remember to show the depth range, direction and a distance scale.



Types of seabed present: (please tick all that you saw and circle the dominant one)

Rocky Reef	Boulders	Cobbles and Pebbles	Mixed Ground	Sand and Gravel	Mud	Wreckage	Other
☐	☑	☑	☑	☑	☐	☐	☐

Did you notice anything unusual or noteworthy about the seabed or the marine life?

lots of Empty Scallop shells.

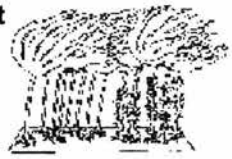
Was there any litter or were there any man-made objects apparent?

~~TYRES~~ + Bottles
SCRAP METAL

What marine life did you see on your dive?

Seabed cover types (tick all those present)

Kelp forest ☑



Kelp park ☐

Mixed seaweeds ☑

Seagrass Bed ☐

Encrusting pink algae ☐

Other - specify ☐ _____

Animal turf on rocks

☐ **Short**

☐ **Tall**

Animal Beds
(e.g. mussels, brittlestars, scallops - state which)

☑ QUEEN SCALLOPS

Sediment with life apparent
(tubes, burrows etc)

☐

Barren sediment
(no life or structures apparent)

☐

Species you saw
Show abundance of each species as **R**are, **O**ccasional, **C**ommon, or if you're unsure, **P**resent.

Species	R, O, C or P
MACROPODIA SP	O
ASCIDIELLA ASPERSA.	O
CORELLA PARALLELOGRAMA	O
ARQUIPECTEN OPERCULART	O
NECORA PUBER.	O
ASTERIAS RUBENS	O
OPHIURA	O
ECHINUS ESCULENTUS	O
ASCIDIA VIRGINEA.	O

Illustrations by Bob Foster-Smith

SEASEARCH SURVEY FORM

Form No (leave blank) SW18-121

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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www.seasearch.org.uk

Validated by O.P	Date 30/10/18	Entered by	Date	MR Reference

Recorder leave blank - for Seasearch use

Your details

[redacted]

Dive/Site details

Site name ~~Unapool~~ ~~POLBAIN PIER~~ Badentarbat Pier

General location Badentarbat Bay
Achiltibuie
Wester Ross, Highland Region

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	58°	01.767	05°	22.484	W
For drift dives From	0	.	0	.	
To	0	.	0	.	

Or OS Grid Reference

Position derived from: (circle) GPS Chart OS map Web mapping

GPS Datum (circle) WGS84 OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☑ sheltered ☐ v sheltered ☐ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☐ v. weak ☑

Date of dive:	28 dd / 09 mm / 18 yy
Start of dive:	11:44 (24hr)
Dive duration:	49 (mins)
Sea temperature:	12 °c
Underwater visibility:	15 m
Drift dive?	~~yes~~ / no
Night dive?	~~yes~~ / no

Did you or your buddy take any of the following?

photographs	(yes) / no
video footage	(yes) / no
specimens	yes / (no)
seaweeds for pressing	yes / (no)

For the area surveyed, what was

the shallowest depth? (m)	0	bsl		bcd
the deepest depth? (m)	9	bsl		bcd
Tidal correction to chart datum				m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

Disused pier surrounded by sand and scattered boulders. Kelp forest and park, Chrome polychaete, Lots of debris, including tyres, bilge pump

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Old pier with kelp and Mytilus mussels

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other Old Pier

Communities: kelp forest ☐ kelp park ☑ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☑

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

Sand with scattered kelp

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☑ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☑ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☑ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

2	3	
m		DEPTH LIMITS
		Upper (from sea level) (i.e. minimum)
		Lower (from sea level) (i.e. maximum)
		Upper (from chart datum) *
		Lower (from chart datum) *

%			SUBSTRATUM
			Bedrock type?:
			Boulders - very large > 1.0 m
			- large 0.5 - 1.0 m
			- small 0.25 - 0.5 m
			Cobbles (fist - head size)
			Pebbles (50p - fist size)
			Gravel - stone
	20		- shell fragments
	20		Sand - coarse
	60		- medium
			- fine
			Mud
			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
60			Artificial - metal
			- concrete
40			- wood
			Other (state)
100	100	100	Total

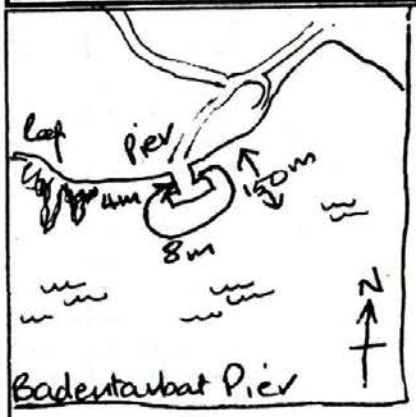
1	2	3	
	1-5		FEATURES - ROCK (all categories)
			Relief of habitat (even - rugged)
			Texture (smooth - pitted)
			Stability (stable - mobile)
			Scour (none - scoured)
			Silt (none - silted)
			Fissures > 10 mm (none - many)
			Crevices < 10 mm (none - many)
			Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

✓		FEATURES – SEDIMENT (1)
		Mounds / casts
		Burrows / holes
		Waves (>10 cm high)
		Ripples (< 10 cm high)
		Subsurface coarse layer?
		Subsurface anoxic (black) layer?

1-5		FEATURES – SEDIMENT (2)
1		Firmness (firm - soft)
2		Stability (stable - mobile)
4		Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

	ph	1	2	3
sponges				
cnidarians: hydroids, anemones, corals,				
Caryophyllia smithii		R		
Metridium senile	✓	R		
[illegible]				
Calvadosia campanulata	✓	R		
Cerianthus lloydii			O	
worms				
Reef worms		C		
Chaetopterus variopedatus			O	
Chone sp	✓		R	
crustaceans				
Necora puber			O	
Galathea strigosa			O	
Carcinus maenas			F	
Munida rugosa			F	
Macropodia sp.			O	
Inachus sp.			R	
Pagurus bernhardus			F	
Pandalus montagui			O	
molluscs				
Pecten maximus			O	
Gibbula umbilicalis mayeri			R	
Lacuna vincta			D	
Mytilus edulis		A		
bryozoans				
Crisularia fenestrata		O		
Securiflustra securifrons sp		O		
Membranipora membranacea		O		

	ph	1	2	3
echinoderms				
Marthasterias glacialis			P	
Asterias rubens		O	F	
Echinus esculentus		O	O	
Asterias [illegible]			F	
Bathyhus sp.	✓	O		
Henricia sp		R		
sea squirts				
Ascidiella aspersa			C	
Botryllus schlosseri		O		
Diplosoma sp	✓	R		
fishes				
Pomatoschistus pictus		P	O	
Ctenolabrus rupestris		O		
Pollachius pollachius		F		
Pollachius virens		F		
seaweeds				
Laminaria hyperborea		C	O	
Saccharina latissima		O	O	
Fucus serratus		C		
Dilsea carnosa			O	
Saccorhiza polyschides		C	C	
Phycodrys rubens		C	C	
Delesseria sanguinea	✓	P		
Ulva sp			O	
other or continuations				
[illegible]				
Bamaria sp		A		
Cancer maenas		O	O	
Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

SEASEARCH SURVEY FORM

Form No (leave blank) SW18 - 120

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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www.seasearch.org.uk

Validated by O.P	Date 30/10/18	Entered by	Date	MR Reference

Recorder leave blank - for Seasearch use

Your details

[redacted]

Dive/Site details

Site name Wagyd Boatyard.

General location East of South Laggich narrows
Loch Broom
Highland Region

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	0	.	0	.	
For drift dives From	57 0	52.671	05 0	07.273	W
To	57 0	52.654	05 0	07.136	W

Or OS Grid Reference

Position derived from: (circle) GPS Chart OS map Web mapping

GPS Datum (circle) WGS84 OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☐ v sheltered ☑ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☑ v. weak ☐

Date of dive: 27 dd / 09 mm / 2018 yy

Start of dive: 15:34 (24hr)

Dive duration: 51 (mins)

Sea temperature: 12 °c

Underwater visibility: 10 m

Drift dive? yes / no

Night dive? yes / no

Did you or your buddy take any of the following?

photographs	(yes) / no
video footage	yes / no
specimens	yes / no
seaweeds for pressing	yes / no

For the area surveyed, what was

the shallowest depth? (m) 2 bsl ☐ bcd

the deepest depth? (m) 12 bsl ☐ bcd

Tidal correction to chart datum ☐ m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

Gently sloping gravel and sediment slope with occasional boulders
Modiolus in shallower water, extensive flame shells in a
band at 10m. Boat-yard on shore,

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Sand and gravel with occassional boulders, Modiolus in 3 - 6 metres, Flame shells common in a band at 10m.

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☑ gravel ☑ sand ☑ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed Limaria sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

1	2	3	
	m		**DEPTH LIMITS**
1			Upper (from sea level) (i.e. minimum)
10			Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
			Bedrock type?:
			Boulders - very large > 1.0 m
10			- large 0.5 - 1.0 m
20			- small 0.25 - 0.5 m
			Cobbles (fist - head size)
10			Pebbles (50p - fist size)
10			Gravel - stone
			- shell fragments
30			Sand - coarse
			- medium
			- fine
			Mud
10			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
10			Other (state) Lmuna nets
100	100	100	**Total**

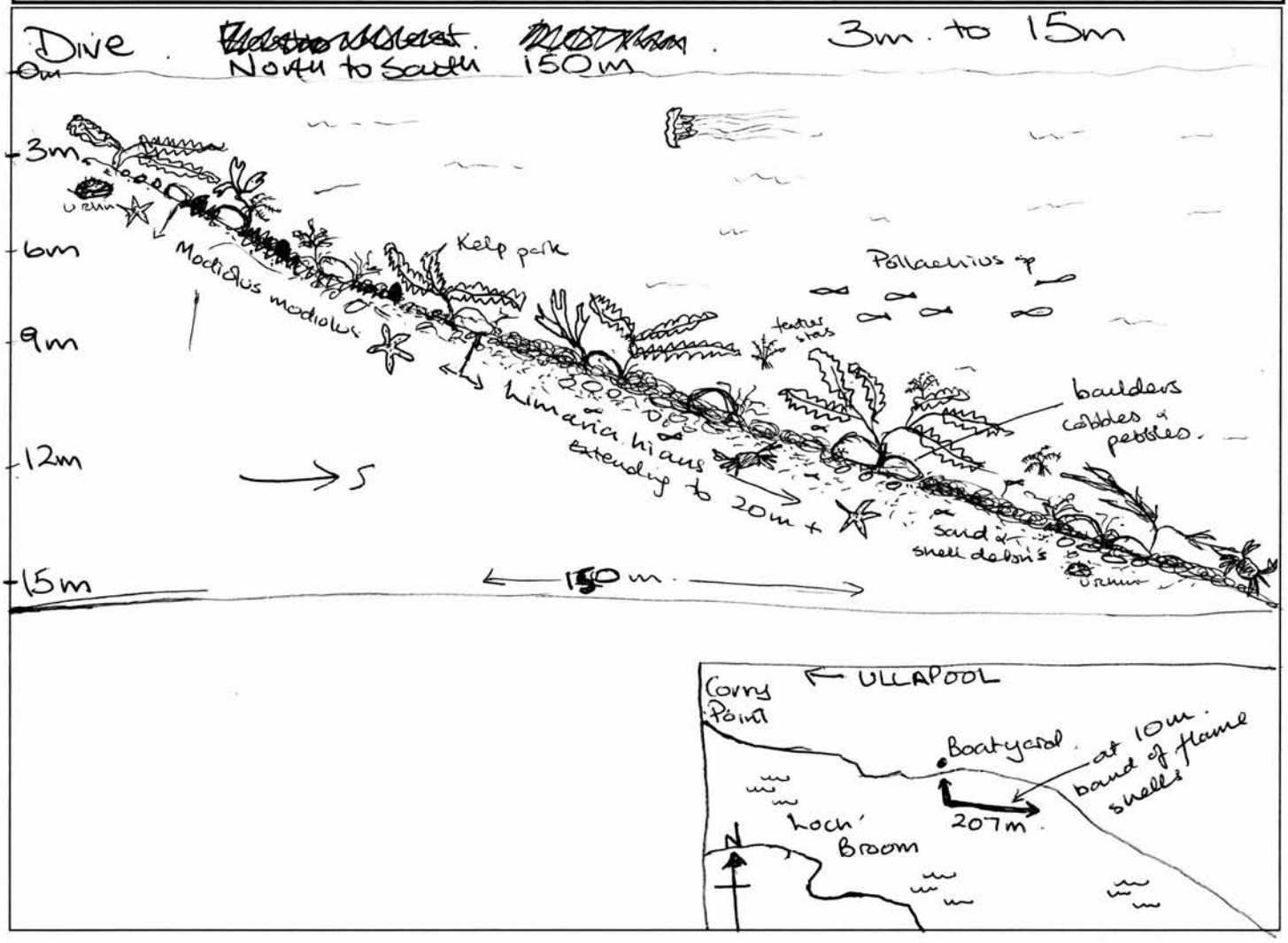
1	2	3	
	1-5		**FEATURES - ROCK (all categories)**
			Relief of habitat (even - rugged)
			Texture (smooth - pitted)
			Stability (stable - mobile)
			Scour (none - scoured)
			Silt (none - silted)
			Fissures > 10 mm (none - many)
			Crevices < 10 mm (none - many)
			Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
	✓		Mounds / casts
	✓		Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

	1-5		**FEATURES – SEDIMENT (2)**
	1		Firmness (firm - soft)
	2		Stability (stable - mobile)
	4		Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

	ph	1	2	3		ph	1	2	3
sponges					echinoderms				
					Amedeon bifida		C		
					Antedon petasus		C		
					Asterias rubens		F		
					Echinus esculentus		F		
					Marthasterias glacialis		O		
					Astropecten irregularis		O		
					Porania pulvillus		R		
					Ophura albida		O		
					Crossaster papposus		O		
cnidarians: hydroids, anemones, corals,					sea squirts				
Campanulina sinuosa		O			Ascidiella aspersa		O		
Kirchenpauera pinnata		O			Corella parallelogramma	✓	R		
Hydractinia echinata		O			Ascidia virginea		O		
Cyanea capillata		O			Corella parallelogramma		R		
					fishes				
					Pollachius pollachius		C		
					P. Merlangus virens		C		
worms					Gadus morhua (juvenile)		F		
Reef worms		F			Pomatoschistus pictus		O		
Serpula vermicularis		O							
crustaceans					seaweeds				
Carcinus maenas		O			Laminaria hyperborea		C		
Necora puber		O			Saccharina latissima		C		
Liocarcinus depurator		F			Halidrys siliquosa		O		
macropodius sp.	✓	R			Ulva sp.		P		
Munida rugosa	✓	O			Encrusting pink		F		
~~Caprella~~ Pagurus bernhardus	✓	C							
Pagurus sp		C							
Hyas araneus		O							
molluscs									
Modiolus modiolus		F							
Limana hians		C							
Buccinum undatum		O							
Gibbula (unnamed)		O							
Turritella communis	✓	P			other or continuations				
Lacuna vincta		O			Mytilus edulis (on rope)		C		
Calliostoma zizyphinum		F			Liocarcinus marmoreus		R		
bryozoans					Pecten maximus		O		
					Trachurus sp.		O		
					Psammechinus miliaris		F		
					Camptella pavida		R		
					Ophura ophura		O		
					Ophiocomina nigra		R		
					Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

SEASEARCH SURVEY FORM

Form No (leave blank) SW18-119

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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Validated by	Date	Entered by	Date	MR Reference
D.C	30/10/18			

Recorder leave blank - for Seasearch use

Your details

[redacted]

Dive/Site details

Site name: OFF BOATYARD, EAST OF CORRY POINT

General location: NEAR ULLAPOOL, LOCH BROOM
Wester Ross
Highland.

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	57°	52.697	05°	07.303	W
For drift dives From	0	.	0	.	
To	0	.	0	.	

Or OS Grid Reference:

Position derived from: (circle) GPS (Chart) OS map Web mapping

GPS Datum (circle) (WGS84) OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☑ v sheltered ☐ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☑ v. weak ☐

Date of dive: 27 dd / 09 mm / 18 yy

Start of dive: 15:30 (24hr)

Dive duration: 48 (mins)

Sea temperature: 12 °c

Underwater visibility: 7 m

Drift dive? ~~yes~~ / no

Night dive? ~~yes~~ / no

Did you or your buddy take any of the following?

photographs (yes) / no

video footage yes / (no)

specimens yes / (no)

seaweeds for pressing yes / (no)

For the area surveyed, what was

the shallowest depth? (m) 0 bsl ☐ bcd

the deepest depth? (m) 21 bsl ☐ bcd

Tidal correction to chart datum ☐ m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

Site is a sloping coarse sandy seabed with cobbles & kelp, down to a depth of ~9m where the seabed slopes more steeply down, is formed of boulders with cobbles and a dense bed of flame shells (Limaria hians).

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Gently sloping sandy seabed from 0 to ~9 metres. Sparse kelp on cobbles, carpet of planktonous algae in patches on sand

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☑ pebbles ☑ gravel ☑ sand ☐ mud ☐ wreckage ☐ other SHELL DEBRIS

Communities: kelp forest ☐ kelp park ☑ mixed seaweeds ☑ seagrass bed ☐ enc pink algae ☑

animal turf ☐ animal bed ☐ sediment with life ☑ barren sediment ☐

2. DESCRIPTION (physical + community)

Boulder slope with cobbles, shell fragments, and some silt (light covering on some rock surfaces).

Biotope Code

Seabed type: rock ☐ boulders ☑ cobbles ☑ pebbles ☐ gravel ☐ sand ☐ mud ☑ wreckage ☐ other

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☑ seagrass bed ☐ enc pink algae ☑

animal turf ☐ animal bed LIMARIA HIANS sediment with life ☐ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

1	2	3	
	m		**DEPTH LIMITS**
0	9		Upper (from sea level) (i.e. minimum)
9	>21		Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
			Bedrock type?:
			Boulders - very large > 1.0 m
		15	- large 0.5 - 1.0 m
		50	- small 0.25 - 0.5 m
		10	Cobbles (fist - head size)
10	10	10	Pebbles (50p - fist size)
			Gravel - stone
5	5	5	- shell fragments
40	40	[illegible]	Sand - coarse
40	40	40	- medium
			- fine
5	5	5	Mud
		5	Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
			Other (state)
100	100	100	**Total**

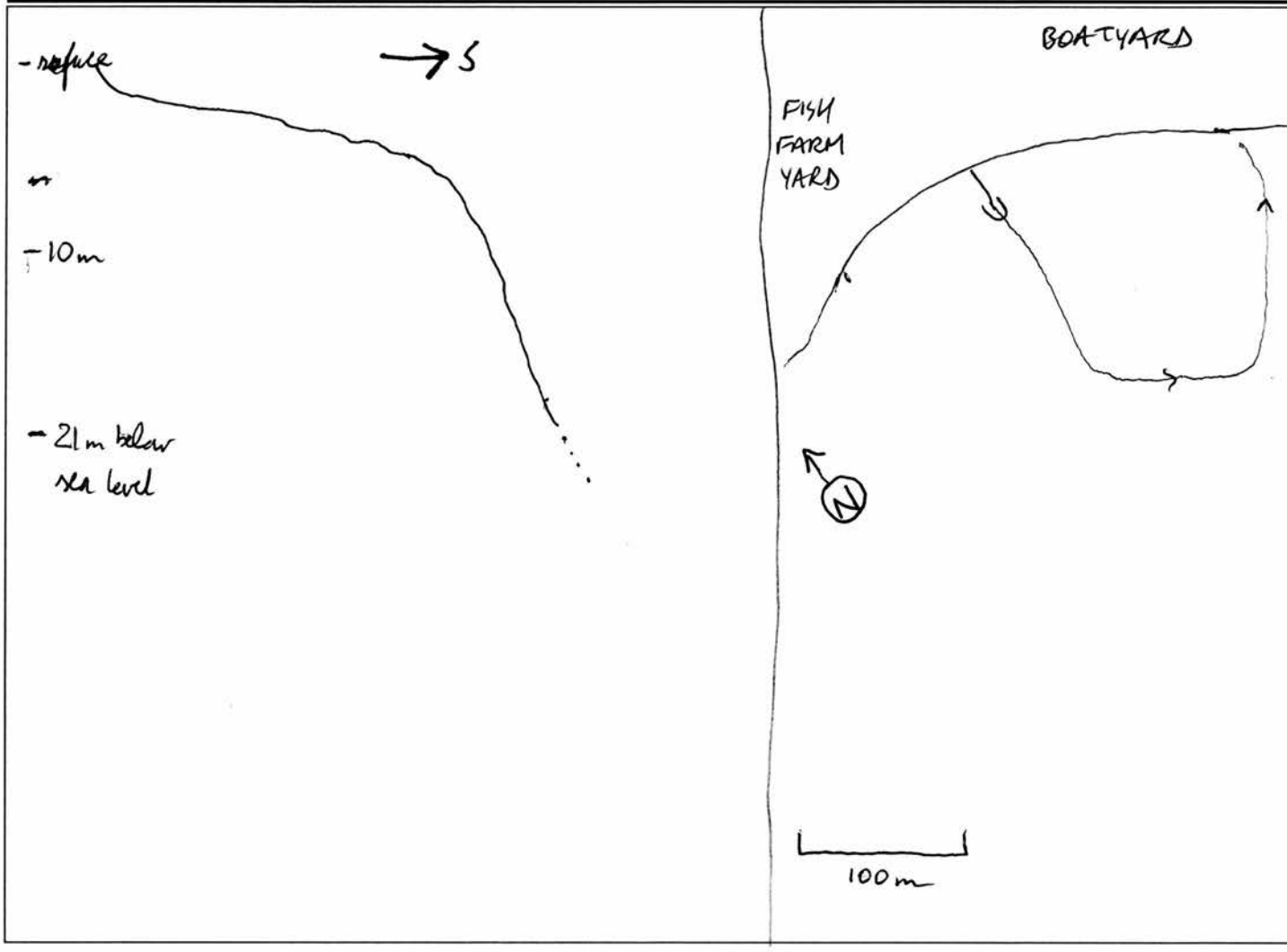
1	2	3	
	1-5		**FEATURES - ROCK (all categories)**
	2		Relief of habitat (even - rugged)
	1		Texture (smooth - pitted)
	2		Stability (stable - mobile)
	1		Scour (none - scoured)
	3		Silt (none - silted)
	4		Fissures > 10 mm (none - many)
	2		Crevices < 10 mm (none - many)
	4		Boulder/cobble/pebble shape (rounded - angular)
	✓		Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
0			Mounds / casts
0			Burrows / holes
0			Waves (>10 cm high)
0			Ripples (< 10 cm high)
—			Subsurface coarse layer?
—			Subsurface anoxic (black) layer?

	1-5		**FEATURES – SEDIMENT (2)**
2			Firmness (firm - soft)
			Stability (stable - mobile)
			Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

	ph	1	2	3		ph	1	2	3
sponges					echinoderms				
AMPHILECTUS FUCORUM	✓	R	O		MARTHASTERIAS GLACIALIS	✓	O		
					ASTROPECTEN IRREGULARIS	✓	O		
					ASTERIAS RUBENS	✓	F		
					OPHIURA SP.	✓	O		
					CROSSASTER PAPPOSUS	✓	R		
					SOLASTER ENDECA				
					ANTEDON PETASUS	✓	F	F	
					PORANIA PULVILLUS	✓	O		
					PSAMMECHINUS MILIARIS	✓	R	R	
cnidarians: hydroids, anemones, corals,					sea squirts				
ALCYONIUM DIGITATUM	✓	O							
PLUMULARIA SETACEA	✓	O	O						
NEMERTESIA RAMOSA	✓	O	C						
					fishes				
worms									
SPIRORBIS SP.	✓	F							
SERPULA VERMICULARIS		O							
POMATOCEROS TRIQUETER	✓	F	O						
crustaceans					seaweeds				
CARCINUS MAENAS	✓	F			LAMINARIA HYPERBOREA	✓	C		
CAPRELLA SPP.	✓	O	O		CHORDA FILUM	✓	C		
MUNIDA RUGOSA	✓	O	F		ENCRUSTING RED ALGAE	✓	F		
INACHUS SP.	✓	O			PINK ENCRUSTING ALGAE	✓	F	F	
NECORA PUBER	✓	O							
PAGURUS SP.	✓	F							
JASSA SP.	✓		O						
MACROPODIA SP.			R						
molluscs									
LIMARIA HIANS			A						
CHLAMYS OPERCULARIS		F							
PECTEN MAXIMUS	✓	O	O						
MODIOLUS MODIOLUS		O	R						
					other or continuations				
					ANTEDON BIFIDA	✓	O	O	
					ECHINUS ESCULENTUS	✓	F	F	
bryozoans					OPHIOTHRIX FRAGILIS	✓		O	
					Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

19

SEASEARCH SURVEY FORM

Form No (leave blank) SW18 - 118

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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Validated by	Date	Entered by	Date	MR Reference
Recorder leave blank - for Seasearch use				

Yo

N	[redacted]
A	
P	

Dive/Site details

Site name	Ardmair Bay					
General location	Ardmair Wester Ross Highland Region					
Position (degrees and decimal minutes – state if in any other format)						
	Latitude		Longitude		W or E	
Centre of site	0	.	0	.		
For drift dives From	57°	55.795	05°	11.919	W	
To	57°	55.814	05°	12.116	W	

Or OS Grid Reference

Position derived from: (circle) GPS / Chart / OS map / Web mapping

GPS Datum (circle) WGS84 / OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☐ v sheltered ☐ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☐ v. weak ☐

Date of dive:	27 dd / 09 mm / 18 yy
Start of dive:	12 : 23 (24hr)
Dive duration:	49 (mins)
Sea temperature:	12 °c
Underwater visibility:	m
Drift dive?	yes / no
Night dive?	yes / no

Did you or your buddy take any of the following?

photographs	yes / no
video footage	yes / no
specimens	yes / no
seaweeds for pressing	yes / no

For the area surveyed, what was

the shallowest depth? (m)	3.5	bsl	bcd
the deepest depth? (m)	7.0	bsl	bcd
Tidal correction to chart datum			m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

a) Boulders in shallows (-4m) leading to coarse sand with scattered cobbles, with kelp cover. change to mobile/ much flatter sand area (~8m) (not surveyed)

b) 15 spined stickleback, stalked jelly and Jomna tormentosa.

c)

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Boulders and cobbles from pebble beach, kelp cover with mixed red/green algae. Kelp well encrusted.

Biotope Code

Seabed type: rock ☐ boulders ✓ cobbles ✓ pebbles ✓ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ✓ kelp park ✓ mixed seaweeds ✓ seagrass bed ☐ enc pink algae ✓

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

Coarse sand/gravel/sand slope under kelp cover.

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ✓ sand ✓ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ✓ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

Rock Sand

1	2	3	
	m		**DEPTH LIMITS**
3.5	5.0		Upper (from sea level) (i.e. minimum)
6.0	7.0		Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
			Bedrock type?:
40			Boulders - very large > 1.0 m
20			- large 0.5 - 1.0 m
20			- small 0.25 - 0.5 m
20			Cobbles (fist - head size)
			Pebbles (50p - fist size)
	30		Gravel - stone
	30		- shell fragments
	[illegible]		Sand - coarse
			- medium
			- fine
			Mud
			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
			Other (state)
100	100	100	**Total**

40

Rock Sand

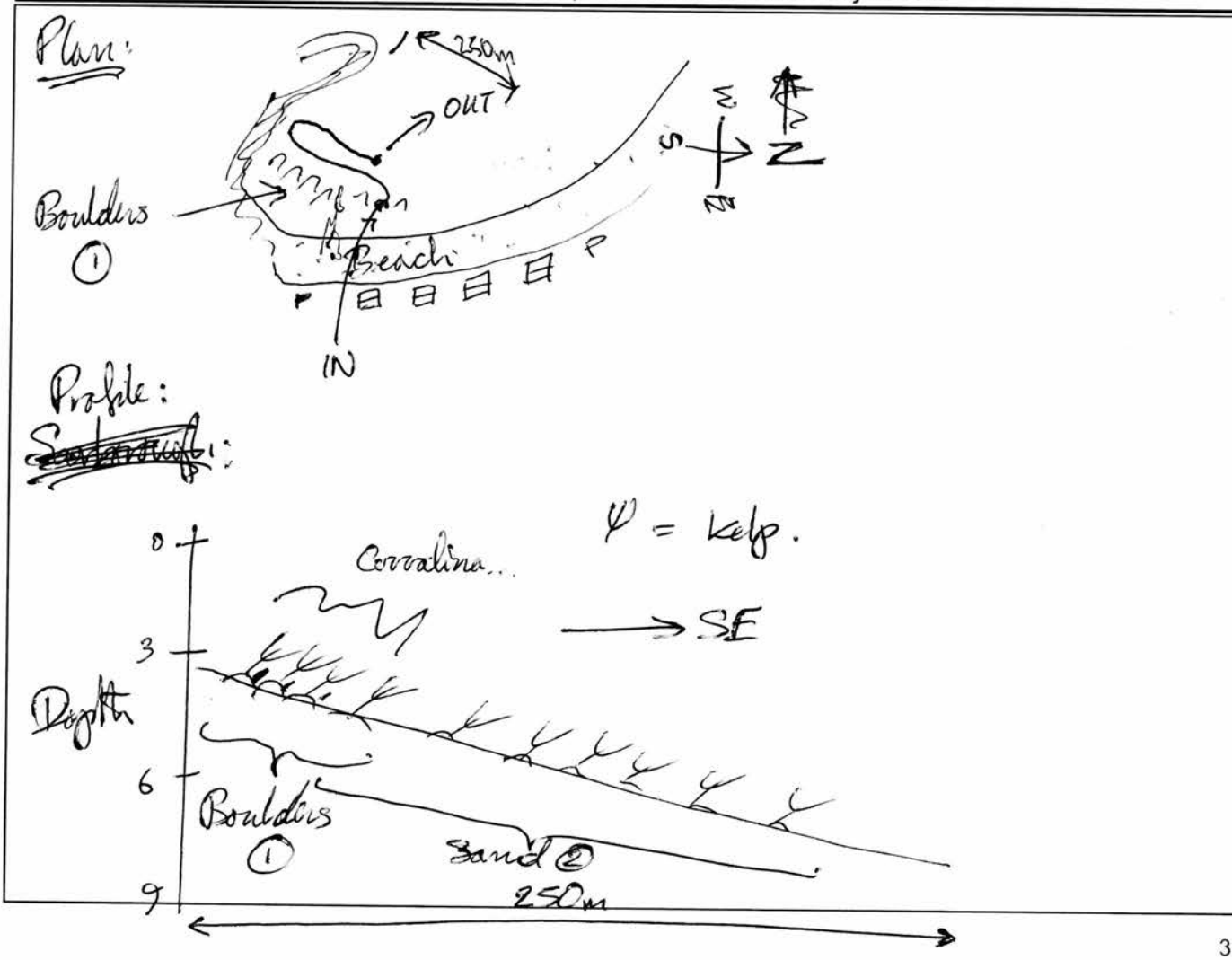
1	2	3	
	1-5		**FEATURES - ROCK (all categories)**
3			Relief of habitat (even - rugged)
2			Texture (smooth - pitted)
1			Stability (stable - mobile)
1			Scour (none - scoured)
			Silt (none - silted)
3			Fissures > 10 mm (none - many)
3			Crevices < 10 mm (none - many)
2			Boulder/cobble/pebble shape (rounded - angular)
✓			Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
	✓		Mounds / casts
	✓		Burrows / holes
			Waves (>10 cm high)
	✓		Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

	1-5		**FEATURES – SEDIMENT (2)**
	3		Firmness (firm - soft)
	4		Stability (stable - mobile)
	3		Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

Rock Gravel

	ph	1	2	3		ph	1	2	3
sponges					echinoderms				
					Asterias rubens	✓			
					Asterpecten irregularis	✓		O	
					Henricia sp.	✓		O	
					Myxthasterias digitalis	✓	O	O	
					Echinus esculentus	✓	O		
cnidarians: hydroids, anemones, corals,					sea squirts				
Urticina felina	✓	O			Diplosoma spongiforme	✓	O		
Obelia agniculata	✓	O			Botryllus schlosseri	✓	O		
Staromedusae sp.	✓	R			Ascidiella aspersa	✓	R		
Cyanea capillata	✓		R						
					fishes				
					Pomatoschistus sp.	✓		O	
					Spinachia spinachia	✓	R		
worms					Gadus morhua	✓		O	
Arenicola marina	✓		O		Myoxocephalus scorpius	✓		R	
Spirobis sp.	✓	F			Syngnathus acus	✓		R	
Spirobranchus sp.	✓	C							
crustaceans					seaweeds				
Carcinus maenas	✓	O	O		P.E.Algae	✓	F		
Pagurus sp.	✓	O	O		Delesseria sanguinea	✓	O		
Cirripedia sp.	✓	O			Chondrus crispus	✓	O		
Liocarcinus depurator	✓		O		Halidrys siliquosa	✓	F		
Necora puber	✓	C	O		Polyides rotundus	✓	O		
Hyas araneus	✓	R	R		Ulva sp.	✓	O	O	
Maeropodia sp.	✓	O	O		Corallina officianalis	✓	C		
Inachus sp.	✓	C			Fucus serratus	✓	F		
molluscs					Chorda filum	✓	F		
Facelina.									
Gibbula cineraria	✓	O							
Pecten maximus	✓	O							
Lacuna vincta	✓	O							
Gibbula magus	✓	O			other or continuations				
Patella sp.	✓	R			Dourinia tormentosa	✓	R		
Gibbula umbilicalis	✓	O							
bryozoans									
Electra pilosa	✓	O							
Membranipora membranacea	✓	F							
					Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

Please save your completed form then email it to the Dive Organiser, the local Seasearch Coordinator or info@seasearch.org.uk

Form no. (leave blank) SW1F-117

SEASEARCH SURVEY FORM

If anything is unclear please refer to the Guidance Notes.
Each pair of divers should complete a form between them.
Please complete all parts of the form. Where there is a * fill in the information only if you know it.

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www.seasearch.org.uk

Validated by J.P	Entered by	MR ref.
Date 30/10/18	Date	Recorder leave blank for Seasearch use

Your details

[redacted]

Dive/site details

Site name	Ardmair Bay			Date of dive	27/09/2018
General location	4Km NW of Ullapool, Wester Ross, Highland Region			Start of dive	12:20 (24hr)
				Dive duration	50 (mins)
				Sea temperature	11 °C
				U/W visibility	6 m
Position	Latitude	Longitude	W or E	Drift dive?	☐
Centre of site	°	°		Night dive?	☐
For drift dives				Did you or your buddy take any of the following?	
From	57 ° 55.803	05 ° 11.914	W	photographs	☑
To	57 ° 55.781	05 ° 12.106	W	video footage	☐
Or OS Grid Ref	square	E	N	specimens	☐
Position derived from	Admiralty chart			seaweeds for pressing	☐
GPS datum	WGS84			For the area surveyed what was	
				the shallowest depth (m)?	2 bsl ☐ bcd
Exposure of site	sheltered			the deepest depth (m)?	6 bsl ☐ bcd
Max tidal stream	< 1 kt			Tidal correction to chart datum	☐ m *

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

Sandstone bedrock reef dropping down from surface to 6 metres then gently sloping sand seabed

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the deepest dive first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description,*

1. DESCRIPTION (physical and community)

Sandstone bedrock with platforms and overhangs, Kelp forest in top and kelp on isolated boulders on sand

Biotope Code

Seabed type: rock ☑ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☑ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☑

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical and community)

Vertical bedrock with platforms, crevices and overhangs

Biotope Code

Seabed type: rock ☑ boulders ☑ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☑

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

3. DESCRIPTION (physical and community)

Sand

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☑ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☑ barren sediment ☐

1	2	3	
m			**DEPTH LIMITS**
0	2	6	Upper (from sea level) (i.e. minimum)
2	6	8	Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

%			**SUBSTRATUM**	
100	100		Bedrock type? sandstone	
		10	Boulders - very large	> 1.0 m
			- large	0.5 - 1.0 m
			- small	0.25 - 0.5 m
			Cobbles (fist - head size)	
			Pebbles (50p - fist size)	
			Gravel - stone	
			- shell fragments	
		50	Sand - coarse	
		30	- medium	
			- fine	
			Mud	
		10	Shells (empty or as large pieces)	
			Shells (living e.g. mussels, limpets)	
			Artificial - metal	
			- concrete	
			- wood	
			Other (state)	
100	100	100	**Total = 100 please!**	

1	2	3		
1-5			**FEATURES - ROCK (all categories)**	
3	3		Relief of habitat	(even - rugged)
2	2		Texture	(smooth - pitted)
1	1		Stability	(stable - mobile)
2	2		Scour	(none - scoured)
1	1		Silt	(none - silted)
4	4		Fissures > 10 mm	(none - many)
3	3		Crevices < 10 mm	(none - many)
	4		Boulder/cobble/pebble shape	(rounded - angular)
☐	☐	☐	Sediment on rock?	(tick if present)

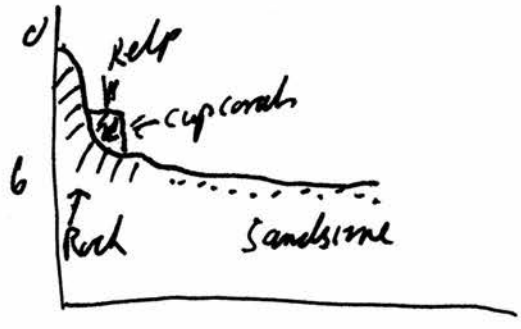
tick			**FEATURES -SEDIMENT (1)**
☐	☐	☐	Mounds / casts
☐	☐	☑	Burrows / holes
☐	☐	☐	Waves (> 10 cm high)
☐	☐	☐	Ripples (< 10 cm high)
☐	☐	☐	Subsurface coarse layer
☐	☐	☐	Subsurface anoxic (black) layer

1-5			**FEATURES - SEDIMENT (2)**	
		2	Firmness	(firm - soft)
		3	Stability	(stable - mobile)
		3	Sorting	(well - poor)

Sketches and plans

*Insert a **profile and/or plan** of the seabed you encountered on your dive into the space below (click in the space). Mark (& number the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indication the direction of the profile or plan and the direction of any current.*

> prepare your sketch on paper
> scan it
> click here to copy the scanned image file from your computer
> NOTE: inserting a second image will erase the first one



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds and animals that you were able to identify **positively** from the different habitats. Use Latin names if possible, but if you do not know them common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it is better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uperabundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet if necessary. If you have a photograph of the species tick the **ph** column.*

YOU CAN CUT AND PASTE GROUP HEADINGS FROM THE BOTTOM INTO ANY POSITION IN THE LIST

	ph	1	2	3		ph	1	2	3
	☐					☐			
	☐					☐			
	☐					☐			
CNIDARIANS: hydroids/anemones/corals	☐					☐			
Alcyonium digitatum	☐		O			☐			
Caryophyllia smithiii	☐		R			☐			
Serpula vermiculairs	☐	O	O			☐			
Terrebelid sp	☐			R		☐			
Arenicola marina	☐			R		☐			
Keel worms	☐	F	F			☐			
Crustaceans	☐					☐			
Carcinus maenas	☐	F	O	O		☐			
Liocarcinus depurator	☐	O	R	R		☐			
Necora puber	☐	O	R			☐			
Cancer pagurus	☐		O	O		☐			
Pagurus sp	☐	C	O	P		☐			
	☐					☐			
	☐					☐			
	☐					☐			
Molluscs	☐					☐			
Gibula cinneraria	☐	R				☐			
	☐					☐			
	☐				Ascidiella aspersa	☐		F	
	☐				Corella parallelograma	☐		O	
Encruusting tan bryozoan	☐		O			☐			
	☐				Pollachius pollachius	☐		F	
	☐				Gadus morhua (juvenile)	☐		O	
	☐				Pollachius virens	☐		F	
	☐					☐			
Echinoderms	☐					☐			
Asteria rubens	☐					☐			
Henricia sp	☐	O			Algae	☐			
Martasterias glacialis	☐	O			Halidrys siliquosa	☐	F		
Echinus esculentus	☐	F			Laminaria hyperborea	☐	A		
Astropecten irregularis	☐		O		Sacchoriza polyschides	☐	O		
Crossaster papposus	☐				Fucus serratus	☐	C		
	☐				Chorda filum	☐	P		
	☐				Ulva sp	☐	P		
	☐				encrusting pink	☐		C	
	☐					☐			
	☐					☐			
	☐					☐			
	☐					☐			
	☐				CR	☐			
	☐				MOLLUSCS	☐			
	☐				BRYOZOANS	☐			
	☐				ECHINODERMS	☐			
	☐				SEA SQUIRTS	☐			
	☐				FISHES	☐			
	☐				SEAWEEDS	☐			
	☐				OTHER	☐			

You can continue your species list on the next page

Thank you for completing this form

All that's left for you to do is to either hand it to the Dive Organiser or fold it into thirds along the dotted lines, tuck one part into the other, add a stamp and send it off.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. It will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public. If you do not agree with this use of the data do not submit the form.

for Seasearch use only	validated by	O.P	date	29/10/18
	entered by		date	
	MarRec No			

first fold

Please affix stamp here

Seasearch
Marine Conservation Society
Over Ross House, Ross Park
Ross-on-Wye
Herefordshire
HR9 7QQ

second fold and tuck in

seasearch
www.seasearch.org.uk

Seasearch is a joint project co-ordinated by the Marine Conservation Society and supported by: The Wildlife Trusts, Natural England, Countryside Council for Wales, Scottish Natural Heritage, DOE Northern Ireland, Joint Nature Conservation Committee, Environment Agency, Marine Biological Association, British Sub-Aqua Club, Professional Association of Diving Instructors, Scottish Sub-Aqua Club, Sub-Aqua Association, Irish Underwater Council and the Nautical Archaeology Society.

Record no (recorder leave blank) SW9-116

Seasearch Observation Form

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This form asks for two types of information from your dive - **what the seabed was like** and **what marine life you saw.** Please read the guidance notes before completing the form. By completing this form you will be adding to our knowledge of the marine environment - helping it to remain fit for life!

Please complete the following sections in a black pen and BLOCK CAPITALS

[redacted]

Site Name Loch Broom Boat Yard	**Date of Dive** 25 / 09 / 15
	Start of dive 15 : 40 (24hr)
	Dive duration 43 (mins)
General Location (inc county) 1 mile east of Ullapool Wester ross	**Max depth of survey** 13.7 m
	Sea Temperature 12 °C
	U/W visibility 5 m

Position at start of dive (degrees & decimal minutes only) **or OS Grid Reference**

057 ° 52.657 N 005 ° 07.231 W or E

2 letters (1 in Ireland), 6 numbers

Position at end of dive (if different only)

~~057~~ ° ~~58.637~~ N ~~005~~ ° ~~07.231~~ W or E

Position derived from (circle) GPS Chart OS Map Web mapping site

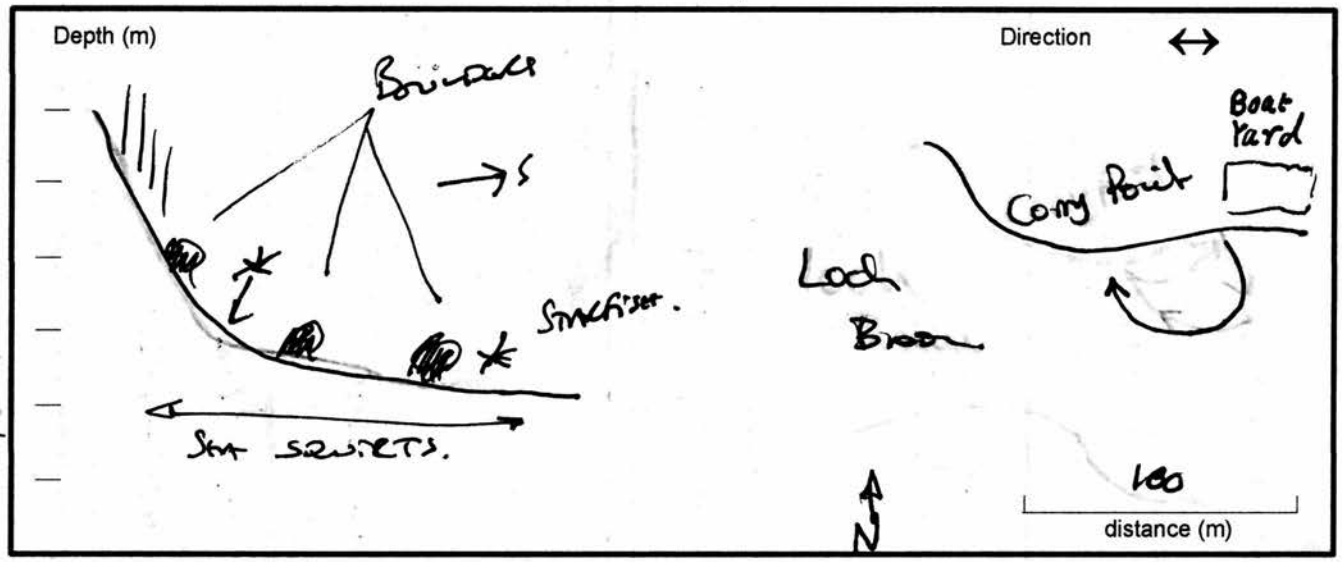
Drift dive? yes / no

Night dive? yes / no

Did you take any photographs? yes / no **or video footage?** yes / no

SO1-01/14

Description of the seabed
Please draw an approximate profile of the seabed (i.e. a side-on view), labelling features and dominant forms as appropriate. Remember to show the depth range, direction and a distance scale.



Types of seabed present: (please tick all that you saw and circle the dominant one)

Rocky Reef	Boulders	Cobbles and Pebbles	Mixed Ground	Sand and Gravel	Mud	Wreckage	Other
☐	☐	☑	☐	☑	☐	☐	☐

Did you notice anything unusual or noteworthy about the seabed or the marine life?

Modiolus modiolus Shells (empty)

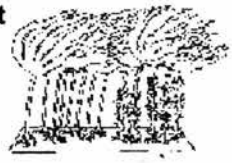
Was there any litter or were there any man-made objects apparent?

Food tin

What marine life did you see on your dive?

Seabed cover types (tick all those present)

Kelp forest ☐



Kelp park ☑

Mixed seaweeds ☑

Seagrass Bed ☐

Encrusting pink algae ☐

Other - specify ☐ ☐

Animal turf on rocks

☐ **Short**

☐ **Tall**

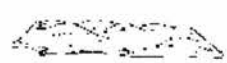
Animal Beds
(e.g. mussels, brittlestars, scallops - state which)

☐ ☐

Sediment with life apparent
(tubes, burrows etc)

☐

Barren sediment
(no life or structures apparent) ☐



Illustrations by Bob Foster-Smith

Species you saw
Show abundance of each species as **R**are, **O**ccasional, **C**ommon, or if you're unsure, **P**resent.

Species Pegarus Sp	C R, O, C or P
Necora Puber	O
Liocarcinus depurator	O
Cancer pagurus Lin	O
Macropodia ~~tenuirostris~~ sp.	O
Antedon bifida	O
Antedon petasus	R
~~Hippasteria phrygiana~~	R
Luidia ciliaris	R
Porania pulvillus	R
Crossaster papposus	R
Asterias rubens	O
Ophiothrix fragilis	O
Ophiura ophiura	O
Cyclopterus lumpus	R
Pecten Maximus	O
Aequipecten opercularis	O
Ascidella aspersa	C
Corella parallelogramma	O
Lanice conchilega	R
Antenna hydroid	C

Thank you for completing this form

All that's left for you to do is to either hand it to the Dive Organiser or fold it into thirds along the dotted lines, tuck one part into the other, add a stamp and send it off.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. It will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public. If you do not agree with this use of the data do not submit the form.

for Seasearch use only	validated by	O.P	date	29/10/18
	entered by		date	
	MarRec No			

first fold

Please affix stamp here

Seasearch
Marine Conservation Society
Over Ross House, Ross Park
Ross-on-Wye
Herefordshire
HR9 7QQ

second fold and tuck in

seasearch
www.seasearch.org.uk

Seasearch is a joint project co-ordinated by the Marine Conservation Society and supported by: The Wildlife Trusts, Natural England, Countryside Council for Wales, Scottish Natural Heritage, DOE Northern Ireland, Joint Nature Conservation Committee, Environment Agency, Marine Biological Association, British Sub-Aqua Club, Professional Association of Diving Instructors, Scottish Sub-Aqua Club, Sub-Aqua Association, Irish Underwater Council and the Nautical Archaeology Society.

(17)

Record no (recorder leave blank) SW18-115

Seasearch Observation Form

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This form asks for two types of information from your dive - **what the seabed was like** and **what marine life you saw.** Please read the guidance notes before completing the form. By completing this form you will be adding to our knowledge of the marine environment - helping it to remain fit for life!

Please complete the following sections in a black pen and BLOCK CAPITALS

[redacted]

Site Name Boat Yard 3 km SE of Ullapool East shore Loch Broom ~~Boat Yard~~	**Date of Dive** 25 / 9 / 18
	Start of dive 14 : 32 (24hr)
	Dive duration 38 (mins)
General Location (inc county) Loch BROOM. Highland	**Max depth of survey** 18 m
	Sea Temperature 12 °C
	U/W visibility 4 m

Position at start of dive (degrees & decimal minutes only) **or OS Grid Reference**

57 ° 52 · 637 N 05 ° 07 · 231 W or E (2 letters (1 in Ireland), 6 numbers)

Position at end of dive (if different only)

° · N ° · W or E

Position derived from (circle) GPS Chart OS Map Web mapping site

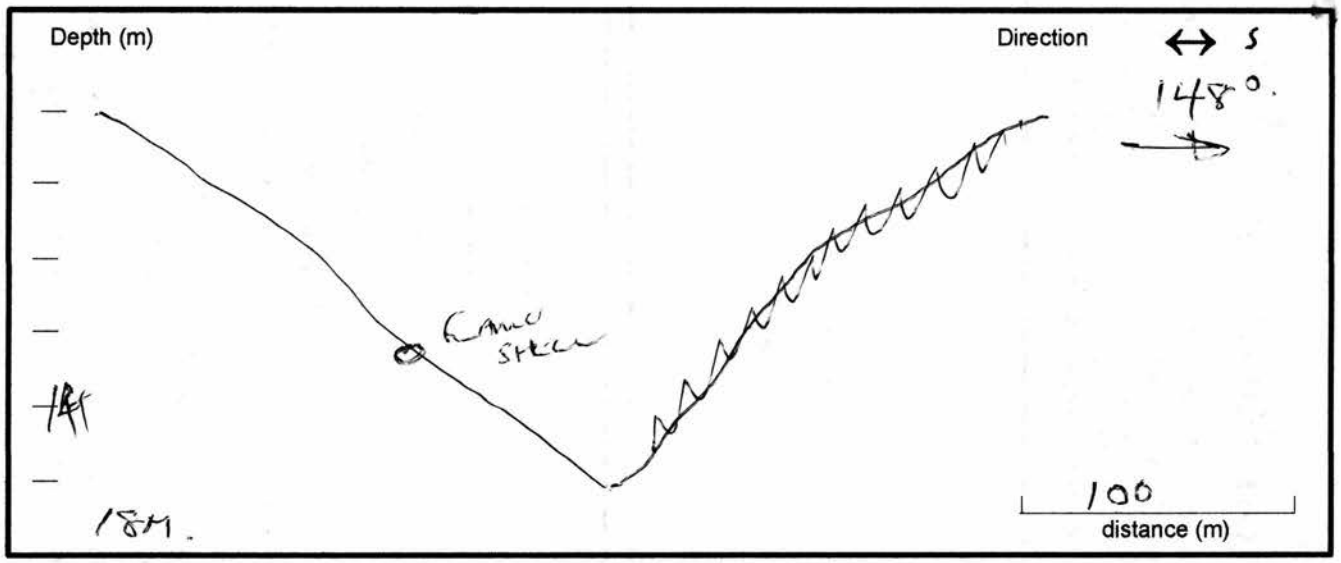
Drift dive? yes / (no)

Night dive? yes / (no)

Did you take any photographs? (yes) / no **or video footage?** yes / no

SO1-01/14

Description of the seabed
Please draw an approximate profile of the seabed (i.e. a side-on view), labelling features and dominant forms as appropriate. Remember to show the depth range, direction and a distance scale.



Types of seabed present: (please tick all that you saw and circle the dominant one)

Rocky Reef	Boulders	Cobbles and Pebbles	Mixed Ground	Sand and Gravel	Mud	Wreckage	Other
☑	☑	☐	☐	☑	☐	☐	☐

Did you notice anything unusual or noteworthy about the seabed or the marine life?

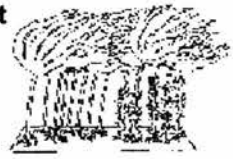
Flame shell nests

Was there any litter or were there any man-made objects apparent?

What marine life did you see on your dive?

Seabed cover types (tick all those present)

Kelp forest ☐



Kelp park ☑

Mixed seaweeds ☐

Seagrass Bed ☐

Encrusting pink algae ☑

Other - specify ☐ ☐

Animal turf on rocks

☐ **Short**

☐ **Tall**

Animal Beds
(e.g. mussels, brittlestars, scallops - state which)

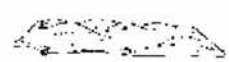
☐ ☐

Sediment with life apparent
(tubes, burrows etc)

☑

Barren sediment
(no life or structures apparent)

☐



Species you saw
Show abundance of each species as **R**are, **O**ccasional, **C**ommon, or if you're unsure, **P**resent.

Species	R, O, C or P
SCYLIORHINUS CANICULA	O
LANICE CONCHILEGA.	O
GALATHEA INTERMEDIA.	O
LINNAEUS. longissimus ?	O
MUNIDA RUGOSA	O
INACHUS CRAB	O
ANTON BIFIDA	O
NEMERTEA ANTONINA	O
ANALIS	O
LIMARIA HIANS.	O
PECTEN MAXIMUS.	O

Illustrations by Bob Foster-Smith

18 (16)

SEASEARCH SURVEY FORM

Form No (leave blank) SW18-11H

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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Validated by O.P	Date 29/10/18	Entered by	Date	MR Reference

Recorder leave blank - for Seasearch use

Your details

[redacted]

Dive/Site details

Site name Ullapool Boat Yard - Loch Broom

General location Ullapool, Wester Ross, Highland Region

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	57°	52.660	05°	07.258	W
For drift dives From	~~57°~~	~~52.637~~	~~05°~~	~~07.231~~	~~W~~
To	0	.	0	.	

Or OS Grid Reference

Position derived from: (circle) GPS, (Chart), OS map, Web mapping

GPS Datum (circle) WGS84 OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☐ v sheltered ☑ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☑ v. weak ☐

Date of dive: 25 dd / 09 mm / 18 yy

Start of dive: 14 : 27 (24hr)

Dive duration: 63 (mins)

Sea temperature: 12 °c

Underwater visibility: 6 m

Drift dive? yes (no)

Night dive? yes (no)

Did you or your buddy take any of the following?

- photographs (yes) / no
- video footage (yes) / no
- specimens yes / (no)
- seaweeds for pressing yes / (no)

For the area surveyed, what was

- the shallowest depth? (m) 6.0 bsl ☐ bcd
- the deepest depth? (m) 15.8 bsl ☐ bcd
- Tidal correction to chart datum ☐ m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

a) Course sand / silt slope with scattered cobble / small boulders. Bands of flame shell beds 9 - 15m

b) Flame shells

c) Boat/fishing litter. Type, Sardine tin

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Gentle slope of coarse sand/gravel with high silt content. Kelp cover decreasing with depth but dense in shallows.

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☑ sand ☑ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☑ mixed seaweeds ☑ seagrass bed ☐ enc pink algae ☑

animal turf ☐ animal bed ☐ sediment with life ☑ barren sediment ☐

2. DESCRIPTION (physical + community)

Flame shell beds, formed in bands parallel to coast along depth contours. Mixed sizes of individuals.

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☑ gravel ☑ sand ☑ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☑

animal turf ☐ animal bed Lemaria sediment with life ☑ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

1	2	3	
m			**DEPTH LIMITS**
6.0	9.0		Upper (from sea level) (i.e. minimum)
15.4	15.4		Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
			Bedrock type?:
			Boulders - very large > 1.0 m
			- large 0.5 - 1.0 m
			- small 0.25 - 0.5 m
			Cobbles (fist - head size)
10	20		Pebbles (50p - fist size)
30	30		Gravel - stone
15	10		- shell fragments
30	15		Sand - coarse
			- medium
			- fine
			Mud
15	15		Shells (empty - or as large pieces)
	10		Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
			Other (state)
100	100	100	**Total**

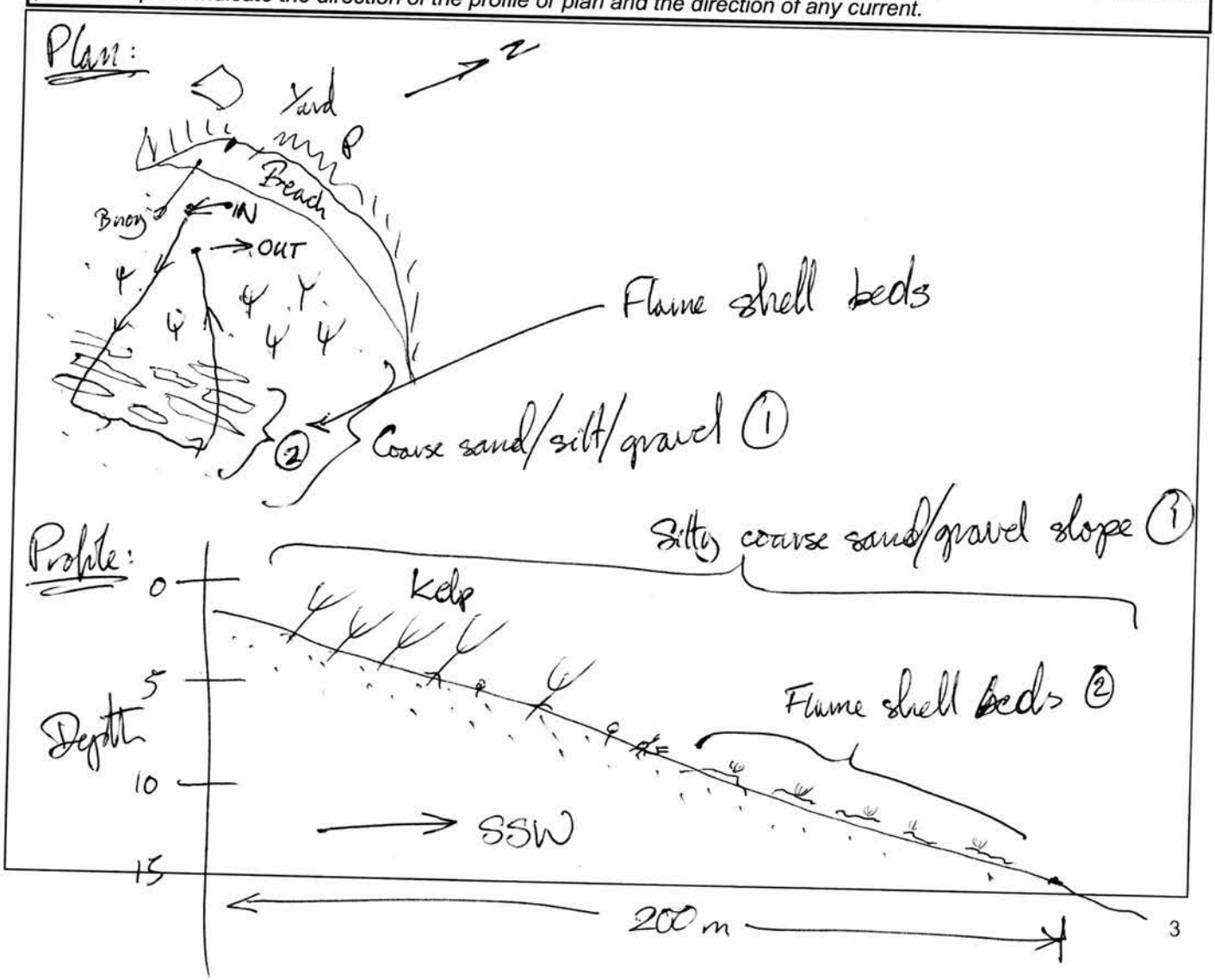
1	2	3	
1-5			**FEATURES - ROCK (all categories)**
			Relief of habitat (even - rugged)
			Texture (smooth - pitted)
			Stability (stable - mobile)
			Scour (none - scoured)
			Silt (none - silted)
			Fissures > 10 mm (none - many)
			Crevices < 10 mm (none - many)
			Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

✓			**FEATURES – SEDIMENT (1)**
✓	✓		Mounds / casts
✓	✓		Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

1-5			**FEATURES – SEDIMENT (2)**
3	3		Firmness (firm - soft)
4	3		Stability (stable - mobile)
4	4		Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

	ph	1	2	3		ph	1	2	3
sponges					echinoderms				
Amphilectus fucorum	✓	O			Marthasterias glacialis	✓	O	O	
					Asterias rubens	✓	O		
Extra → ~~Tassa~~ sp	✓	R			Antedon petasus	✓	O		
Electra pilosa					Ophiura sp.	✓	R		
					Astropecten irregular	✓	O		
					Echinus esculentus	✓	O	O	
					Antedon bifida	✓			
					Porania pulvillus	✓	R		
					Ophiothrix fragilis	✓	O		
cnidarians: hydroids, anemones, corals,					sea squirts				
Obelia geniculata	✓	O			Corella parallelogramma	✓	F		
Hydractinia echinata	✓	R			Ascidiella aspersa	✓	F		
Nemertesia ramosa	✓	O			~~Ascidia mentula~~				
Nemertesia antennina	✓	R			Ascidia virginea	✓	R		
Halecium halecinum	✓	R			Pyura sp.	✓	R		
Alcyonium digitata	✓	R							
Plumularia setacea	✓	O							
Caryophyllia smithii	✓	O			fishes				
Tubularia indivisa	✓	R			Pomatoschistus pictus	✓	O		
~~Phasis~~ Metridium dianthus	✓	R			Pholis gunnellus	✓	R		
worms					Gadus morhua	✓	O		
Spirographis sp	✓	F			Pomatoschistus sp.	✓			
Spirorbis sp	✓	F			Trisopterus minutus	✓	O		
Lanice conchilega	✓								
Serpula vermicularis	✓	R							
Terebellid sp	✓	R							
crustaceans					seaweeds				
Carcinus maenas	✓	O			Laminaria hyperborea	✓	C		
Munida rugosa	✓	F			Chorda filum	✓	O		
Pagurus sp.	✓	O	O		Desmarestia viridis	✓	O		
Cirripedia sp.	✓				P.E.A.	✓	F		
Macropodia sp.	✓	R	R						
~~Pagurus bernhardus~~	✓	O			Palmaria palmata	✓	R		
Cancrillid sp.	✓	O			Alaria esculenta	✓	R		
Inachus sp.	✓	R							
molluscs					Asparagopsis armata	✓	O		
Pecten maximus	✓	O			Laminaria digitata				
Limaria hians	✓		F		Coccotylus truncatus	✓	R		
Mytilus edulis	✓	O			Lepidochitona cinerea	✓	O		
~~Patella sp~~	✓	R			Membranoptera membranacea	✓	R		
Trivia arctica	✓	R			other or continuations				
Lasaea rubra	✓	O			Eudendrium ramosum	✓	R		
Aequipecten opercularis (juv)	✓	O			Polyides rotunda	✓	F		
bryozoans					Ectopleura sp.	✓	R		
Omalozoa ramulosa	✓	R			Cibula maius	✓	O		
~~Electra pilosa mat~~	✓	R			Buccinum undatum	✓	O		
Conopeum reticulum ?	✓	R			Henricia sp.	✓	R		
Alcyonidium diaphanum	✓	R			Facelina bostoniensis	✓	R		
extra Flustra foliacea	✓	R			Cuthona concinna	✓	R		
Tubulipora flabellaris	✓	R			*Continue on a separate sheet if you need to*				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

SEASEARCH SURVEY FORM

Form No (leave blank) SW18 -113

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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www.seasearch.org.uk

Validated by O.P	Date 29/10/18	Entered by	Date	MR Reference

Recorder leave blank - for Seasearch use

Your details

[redacted]

Dive/Site details

Site name Loch Broom Boatyard

General location 3Km SE of Ullapool, East side of narrows, Loch Broom Highland region

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	57°	52.657	05°	07.263	W
For drift dives From	0	.	0	.	
To	0	.	0	.	

Or OS Grid Reference

Position derived from: (circle) GPS Chart OS map Web mapping

GPS Datum (circle) WGS84 OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☑ v sheltered ☐ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☑ v. weak ☐

Date of dive: 25 dd / 09 mm / 18 yy

Start of dive: 14:25 (24hr)

Dive duration: 43 (mins)

Sea temperature: 12 °c

Underwater visibility: 6 m

Drift dive? yes / no

Night dive? yes / no

Did you or your buddy take any of the following?

photographs (yes) / no

video footage (yes) / no

specimens yes / no

seaweeds for pressing yes / no

For the area surveyed, what was

the shallowest depth? (m) 3 bsl ____ bcd

the deepest depth? (m) 16 bsl ____ bcd

Tidal correction to chart datum ____ m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

Sloping sediment ~~slop~~ seabed with ~~boulders~~ occasional boulders. Kelp down to 10m, Modiolus from 3 – 8m, Flame shell nests from 8m to 15m. Some boatyard/~~from~~ fish farm debris on seabed.

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Kelp park on sediment slope with large Modiolus

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☑ mud ☑ wreckage ☐ other

Communities: kelp forest ☐ kelp park ☑ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed MODIOLUS sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

sediment slope with bands of Limaria hians

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed Limaria hians sediment with life ☑ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

1	2	3	
	m		**DEPTH LIMITS**
			Upper (from sea level) (i.e. minimum)
			Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
			Bedrock type?:
			Boulders - very large > 1.0 m
			- large 0.5 - 1.0 m
	10		- small 0.25 - 0.5 m
	20		Cobbles (fist - head size)
	20		Pebbles (50p - fist size)
			Gravel - stone
			- shell fragments
			Sand - coarse
		20	- medium
			- fine
	40	40	Mud
			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
		10	Other (state) Lemanea reels
100	100	100	**Total**

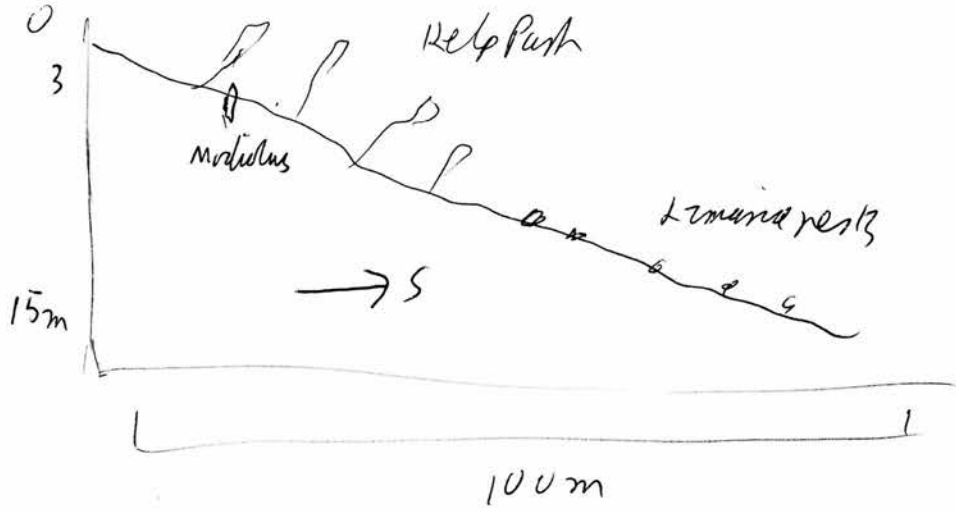
1	2	3	
	1-5		**FEATURES - ROCK (all categories)**
			Relief of habitat (even - rugged)
			Texture (smooth - pitted)
			Stability (stable - mobile)
			Scour (none - scoured)
			Silt (none - silted)
			Fissures > 10 mm (none - many)
			Crevices < 10 mm (none - many)
1			Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
			Mounds / casts
			Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

	1-5		**FEATURES – SEDIMENT (2)**
			Firmness (firm - soft)
			Stability (stable - mobile)
			Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

	ph	1	2	3		ph	1	2	3
sponges					echinoderms				
					Echinus esculentus		O	O	
					Psammechinus miliaris		F	F	
					Asterias rubens		F	F	
					Marthasterias glacialis		O	O	
					Asterpecten irregularis			O	
					Amphipholis squamata			F	
					Ophiura ophiura			R	
					Solaster endeca		R		
cnidarians: hydroids, anemones, corals,					sea squirts				
Nemertesia antennina			O		Ascidiella aspersa			O	
					Ciona intestinalis			O	
					Sa				
					fishes				
					Pomatoschistus pictus		O	O	
					Gobius cobitis flavescens		O	O	
worms					Pleuronectes platessa		R		
Reef worms		F	F		Phycis phycis		R		
Spirorbis spirorbis		F	F		Pollachius pollachius		O	O	
Serpula vermicularis		R			Merlangius merlangus		R	O	
					Gaidropsarus mediterraneus juvenile		R	R	
crustaceans					seaweeds				
Carcinus maenas		O	O		Laminaria hyperborea		C		
Liocarcinus depurator			O		Fucus serratus		C		
Munida rugosa		O	F		Chorda filum		C		
Pagurus sp.		O	O		encrusting pink		O		
Pagurus bernhardus		O	O		Saccharina latissima		O		
Balanus balanus		O	O						
Cancer pagurus		R							
Necora puber		R							
molluscs									
Mytilus edulis		F	R						
Buccinum undatum		O	O						
Gibbula cineraria		O							
Tunicate shells			O						
Pecten maximus			O		other or continuations				
Chlamys opercularis			O		Chiton sp.		R	R	
Sepia officinalis eggs			R		Limanda limanda			R	
brydzoans					Trachurus sp.		R		
Membranipora membranacea		O			Macropodia sp		R		
					Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

SEASEARCH SURVEY FORM (12)

Form No (leave blank) SW15-112

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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Validated by	Date	Entered by	Date	MR Reference
cp	29/10/18			

Recorder leave blank - for Seasearch use

Your details

[redacted]

Postcode PA29 6XR

Dive/Site details

Site name Eilean na Gaimhich

General location Eilean Fada Mor
Scarinish
Highland Region

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	58°	00.646	05°	26.171	W.
For drift dives From	0	.	0	.	
To	0	.	0	.	

Or OS Grid Reference

Position derived from: (circle) GPS Chart OS map Web mapping

GPS Datum (circle) WGS84 OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☑ v sheltered ☐ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☑ <1kt ☐ v. weak ☐

Date of dive: 24 dd / 09 mm / yy

Start of dive: 12:54 (24hr)

Dive duration: 50 (mins)

Sea temperature: 12 °c

Underwater visibility: 15 m

Drift dive? yes / (no)

Night dive? yes / (no)

Did you or your buddy take any of the following?

photographs (yes) / no

video footage (yes) / no

specimens yes / no

seaweeds for pressing yes / no

For the area surveyed, what was

the shallowest depth? (m) 0 bsl ☐ bcd

the deepest depth? (m) 7 bsl ☐ bcd

Tidal correction to chart datum ☐ m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

Tidal channel with a low cliff on the north side and a mixed beach on the south side. Maerl in the centre of the channel. Maerl covered in filamentous algae. Scalded jellyfish, shoals of saithe/pollack, and sandeels.

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Shell sand and maerl in shallow tidal channel, maerl covered in kelp and red foliose algae. Cerianthus common in sediment

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☑ mud ☐ wreckage ☐ other maerl

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☑ barren sediment ☐

2. DESCRIPTION (physical + community)

Rocky reef from 5m to surface, encrusting red and Alcyonium. Kelp on top of wall

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☑ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☑

animal turf Alcyonium ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

1	2	3	
m			**DEPTH LIMITS**
0	0		Upper (from sea level) (i.e. minimum)
7	5		Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
	100		Bedrock type?:
			Boulders - very large > 1.0 m
			- large 0.5 - 1.0 m
			- small 0.25 - 0.5 m
			Cobbles (fist - head size)
			Pebbles (50p - fist size)
			Gravel - stone
			- shell fragments
50			Sand - coarse
10			- medium
			- fine
			Mud
40			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
			Other (state)
100	100	100	**Total**

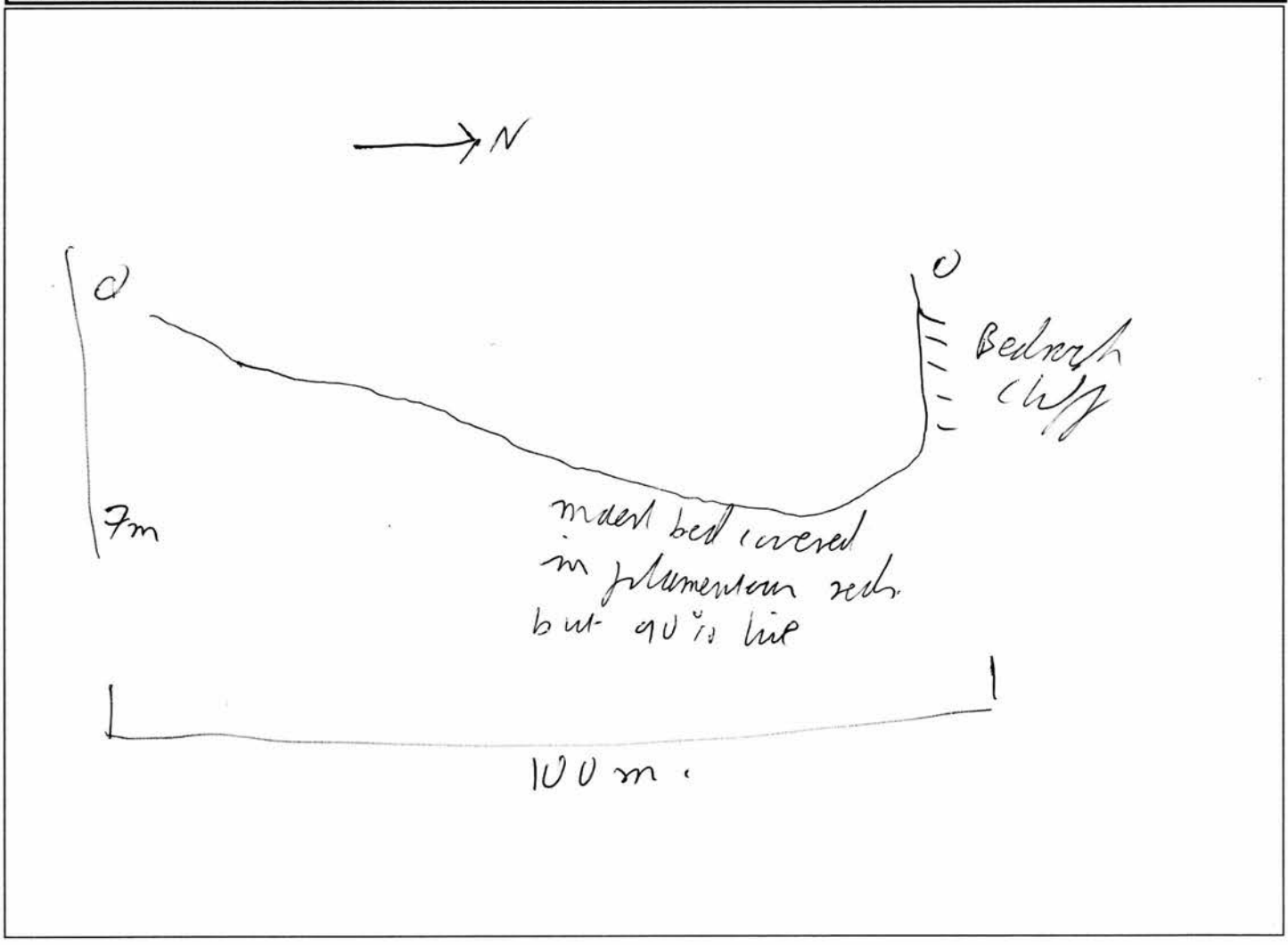
1	2	3	
1-5			**FEATURES - ROCK (all categories)**
	4		Relief of habitat (even - rugged)
	2		Texture (smooth - pitted)
	1		Stability (stable - mobile)
	1		Scour (none - scoured)
	1		Silt (none - silted)
	3		Fissures > 10 mm (none - many)
	3		Crevices < 10 mm (none - many)
			Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
			Mounds / casts
✓			Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

1-5			**FEATURES – SEDIMENT (2)**
1			Firmness (firm - soft)
2			Stability (stable - mobile)
3			Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

	ph	1	2	3		ph	1	2	3
sponges					echinoderms				
Myxilla mesitans			O		Henricia sp			R	
					Echinus esculentus		C	C	
					Luidia ciliaris		F		
					Marthasterias glacialis		F		
					Asterias rubens		F		
					Asbropecten irregularis		O		
cnidarians: hydroids, anemones, corals,					sea squirts				
Cerianthus lloydii		A			Ascidia mentula		O	F	
Alcyonium digitatum			F		Styrtylus echinatus		O		
Sbelia geniculata		F			Ascidiella aspersa		O	O	
Metridium senile		C			Botrylloides sp		A		
Calliactis parasitica		R							
fishes									
Pollachius pollachius							C		
Pollachius virens							C		
worms					Gobiusculus flavescens		O		
Lanice conchilega		O			Sandeel sp		C		
Keel worms		O			Pomatoschistus pictus		F		
					Gadus morhua (juvenile)		O		
					Urasse sp		R		
crustaceans					seaweeds				
Liocarcinus marmoreus		R			encrusting pink			A	
Liocarcinus depurator		O			Maerl		A		
Necora puber		O	O		Sodium		R		
Homarus gammarus		X	R		Laminaria digitata		O		
Cancer pagurus		F			Laminaria hyperborea		C		
~~Leptocarcinus~~					Saccharina latissima		C		
Carcinus maenas		O			Chorda filum		C		
Macropodia sp		R			Ulva sp		O		
molluscs					Corallina officinalis		R		
Pecten maximus spat		O			Scinia sp		R		
Calliostoma zizyphinum		O			Filamentous red mats		A		
Ensis ensis		O							
Glycymeris glycymeris		O							
Trivia monacha		R			other or continuations				
Aequipecten opercularis		R			Inachus sp		R		
bryozoans									
Membranipora membranacea		F							
					Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

Thank you for completing this form

All that's left for you to do is to either hand it to the Dive Organiser or fold it into thirds along the dotted lines, tuck one part into the other, add a stamp and send it off.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. It will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public. If you do not agree with this use of the data do not submit the form.

for Seasearch use only	validated by	CP	date	29/10/18
	entered by		date	
	MarRec No			

first fold

Please affix stamp here

Seasearch
Marine Conservation Society
Over Ross House, Ross Park
Ross-on-Wye
Herefordshire
HR9 7QQ

second fold and tuck in

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www.seasearch.org.uk

Seasearch is a joint project co-ordinated by the Marine Conservation Society and supported by: The Wildlife Trusts, Natural England, Countryside Council for Wales, Scottish Natural Heritage, DOE Northern Ireland, Joint Nature Conservation Committee, Environment Agency, Marine Biological Association, British Sub-Aqua Club, Professional Association of Diving Instructors, Scottish Sub-Aqua Club, Sub-Aqua Association, Irish Underwater Council and the Nautical Archaeology Society.

(14)

Record no (recorder leave blank) SW18-111

Seasearch Observation Form

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This form asks for two types of information from your dive - **what the seabed was like** and **what marine life you saw.** Please read the guidance notes before completing the form. By completing this form you will be adding to our knowledge of the marine environment - helping it to remain fit for life!

Please complete the following sections in a black pen and BLOCK CAPITALS

[redacted]

Site Name NE Tanera Bey Caolas na Gruimlich ~~Stanmore Islet~~	**Date of Dive** 24 / 9 / 18
	Start of dive 13 : 00 (24hr)
	Dive duration 40 (mins)
General Location (inc county) Anchorage between Tanera Bey and Eilean Fada Mor, Summer Isles, Highland.	**Max depth of survey** 8 m
	Sea Temperature 12 °C
	U/W visibility 10 m

Position at start of dive (degrees & decimal minutes only) **or OS Grid Reference**

58 ° 00 · 626 N 005 ° 26 · ~~247~~ 322 W or E

2 letters (1 in Ireland), 6 numbers

Position at end of dive (if different only)

58 ° 00 · 609 N 005 ° 26 · 155 W or E

Position derived from (circle) GPS Chart OS Map Web mapping site

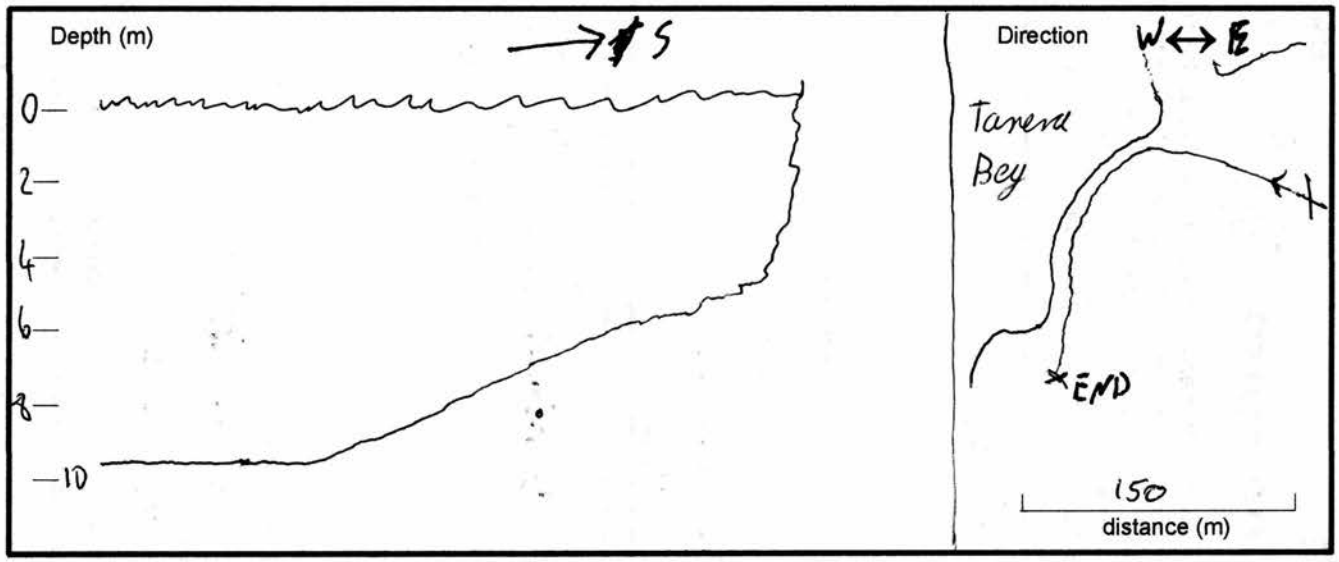
Drift dive? yes / (no)

Night dive? yes / (no)

Did you take any photographs? yes / no **or video footage?** (yes) / no

SO1-01/14

Description of the seabed
Please draw an approximate profile of the seabed (i.e. a side-on view), labelling features and dominant forms as appropriate. Remember to show the depth range, direction and a distance scale.



Types of seabed present: (please tick all that you saw and circle the dominant one)

Rocky Reef	Boulders	Cobbles and Pebbles	Mixed Ground	Sand and Gravel	Mud	Wreckage	Other
☑	☑	☑	☐	☑	☐	☐	☐

Did you notice anything unusual or noteworthy about the seabed or the marine life?

MOBILE DEBRIS & SEAWEED ON. FLAT SANDY SEABED - LOTS of life

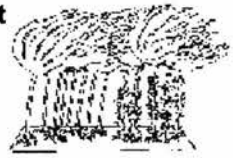
Was there any litter or were there any man-made objects apparent?

YES : CLEANING WIPE, METAL DINNER PLATE

What marine life did you see on your dive?

Seabed cover types (tick all those present)

Kelp forest ☐



Kelp park ☑

Mixed seaweeds ☑

Seagrass Bed ☐

Encrusting pink algae ☑

Other - specify ☐

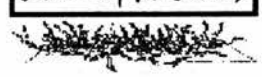
Animal turf on rocks

☑ **Short**

☐ **Tall**

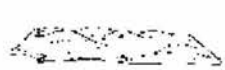
Animal Beds
(e.g. mussels, brittlestars, scallops - state which)

☑ BURROWING ANEMONES



Sediment with life apparent
(tubes, burrows etc) ☐

Barren sediment
(no life or structures apparent) ☐



Illustrations by Bob Foster-Smith

Species you saw
Show abundance of each species as **R**are, **O**ccasional, **C**ommon, or if you're unsure, **P**resent.

Species	R, O, C or P
EUTRIGLA GURNARDUS	R
PLEURONECTES PLATESSA	R
CHORDA FILUM	C
SYNGNATHUS ACUS	R
LAMINARIA HYPERBOREA	C
CERIANTHUS LLOYDII	C
ECHINUS ESCULENTUS	O
CORELLA PARALELLOGRAMMA	R
ASCIDIA MENTULA	C
ASCIDIELLA ASPERSA	C
PECTEN MAXIMUS	O
CHLAMYS (AEQUIPECTEN) SP.	O
ASTERIAS RUBENS	O
MARTHASTERIAS GLACIALIS	R
POMATOSCHISTUS PICTUS	R
TRISOPTERUS MINUTUS	O
ASTROPECTEN IRREGULARIS	O
LUIDIA CILIARIS	O
LANICE CONCHILEGA	R
ADAMSIA ~~CARCINOPADOS~~ PALLIATA	R
PAGURUS PRIDEAUX	R

SEASEARCH SURVEY FORM
Species Continuation Sheet

Form No (leave blank) SW18-111

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Site Name	NE Tanera Beg, Summer Isles
Date of Survey	24/9/18
Recorder	Steve Bishop / Lewis Press

	ph	1	2	3		ph	1	2	3
CHAETOPTERUS VARIOPEDATUS	✓	R							
ASCIDIA VIRGINEA	✓	O							
LITHOTHAMNION SP.	✓	F							
[redacted] CONOPEUM SP.	✓	O							
GOBIUSCULUS FLAVESCENS	✓	O							
ASTROPECTEN IRREGULARIS	✓	O							
DICTYOTA DICHOTOMA	✓	O							
GIBBULA CINERARIA	✓	O							
NECORA PUBER	✓	F							
BOTRYLLUS SCHLOSSERI	✓	A							
FUCUS SPIRALIS	✓	R							
ASTERIAS RUBENS	✓	F							
CANCER PAGURUS	✓	O							
POMATOCEROS SP.	✓	F							
[redacted] ALCYONIUM DIGITATUM	✓	O							
CARYOPHYLLIA SMITHII	✓	A							
~~[redacted]~~									
ACTINOTHOE SPHYRODETA	✓	R							
THOROGOBIUS EPHIPPIATUS	✓	O							
GALATHEA STRIGOSA	✓	O							
WHITE ENCRUSTING SPONGE	✓	O							

17 (13)

SEASEARCH SURVEY FORM

Form No (leave blank) SW18-110

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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Validated by	Date	Entered by	Date	MR Reference
OP	29/10/14			

Recorder leave blank - for Seasearch use

Your details

[redacted]

Dive/Site details

Site name: West Eilean Faola Mór / Caolas na Gainmhich

General location: Summer Isles, Wester Ross, Highland Region

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	58°	00.8	05°	26.	W
For drift dives From	58°	00.845	05°	26.304	
To	58°	00.747	05°	26.220	

Or OS Grid Reference:

Position derived from: (circle) GPS Chart OS map Web mapping

GPS Datum (circle) WGS84 OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☐ v sheltered ☑ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☑ v. weak ☐

Date of dive: 24 dd / 09 mm / 18 yy

Start of dive: 12:38 (24hr)

Dive duration: 42 (mins)

Sea temperature: 12 °c

Underwater visibility: 6 m

Drift dive? yes / (no)

Night dive? yes / (no)

Did you or your buddy take any of the following?

- photographs (yes) / no
- video footage yes / (no)
- specimens yes / (no)
- seaweeds for pressing yes / (no)

For the area surveyed, what was

- the shallowest depth? (m) 2 bsl ☐ bcd
- the deepest depth? (m) 11.6 bsl ☐ bcd
- Tidal correction to chart datum ☐ m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

a) A dive from boulder/wall access coarse sand/gravel/shell bottomed sound to another wall. With kelp+algae cover and sediment species

b) Many round and mobile/loose sponges + plumobranchus

c) None

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Shear bedrock wall with sloped boulder fall. Kelp forest tending to kelp park towards bottom. Coabs, urchins and P.E.A. Shoals of juv gadoids.

Biotope Code

Seabed type: rock ✓ boulders ✓ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ✓ kelp park ✓ mixed seaweeds ✓ seagrass bed ☐ enc pink algae ✓

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

Coarse sand/gravel/shell seabed. Gently sloping to channel centre of channel. sound..

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ✓ sand ✓ mud ☐ wreckage ☐ other shell

Communities: kelp forest ☐ kelp park ✓ mixed seaweeds ✓ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ✓ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

Rock sand

1	2	3	
	m		**DEPTH LIMITS**
3.0	7.0		Upper (from sea level) (i.e. minimum)
7.0	11.6		Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
			Bedrock type?:
20			Boulders - very large > 1.0 m
50			- large 0.5 - 1.0 m
20			- small 0.25 - 0.5 m
10			Cobbles (fist - head size)
	10		Pebbles (50p - fist size)
	30		Gravel - stone
	25		- shell fragments
	25		Sand - coarse
			- medium
			- fine
			Mud
	10		Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
			Other (state)
100	100	100	**Total**

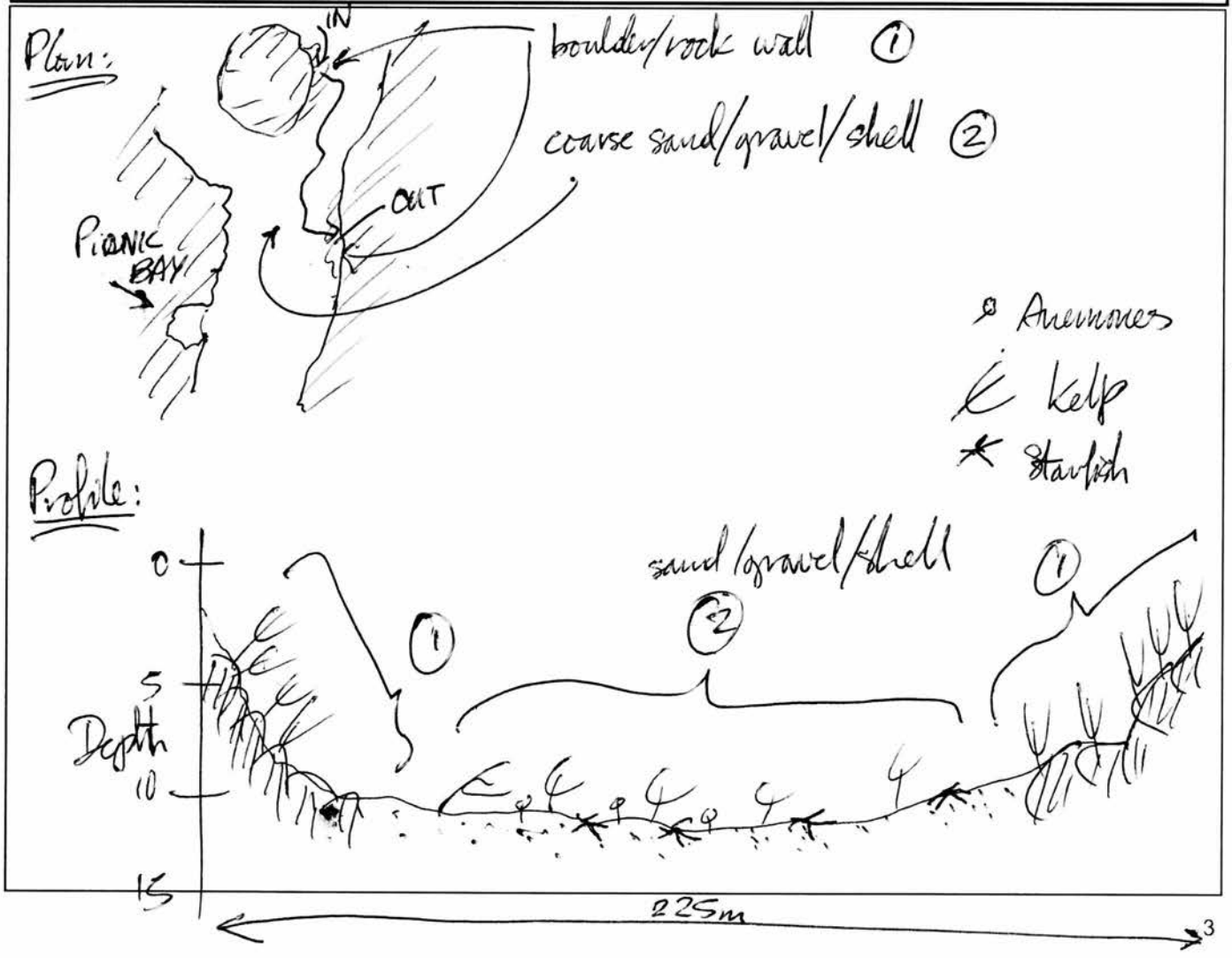
1	2	3	
	1-5		**FEATURES - ROCK (all categories)**
2			Relief of habitat (even - rugged)
2			Texture (smooth - pitted)
1			Stability (stable - mobile)
1			Scour (none - scoured)
1			Silt (none - silted)
3			Fissures > 10 mm (none - many)
2			Crevices < 10 mm (none - many)
2			Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
	✓		Mounds / casts
	✓		Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

	1-5		**FEATURES – SEDIMENT (2)**
	4		Firmness (firm - soft)
	4		Stability (stable - mobile)
	2		Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

Rock Gully

	ph	1	2	3		ph	1	2	3
sponges					echinoderms				
Suberites carnosus	✓		O		Echinus esculanus	✓	F	O	
Suberites ficus	✓		O		Asterias Rubens	✓		F	
Suberites massa.					Aulelon bifida	✓		F	
					Ophiuroidea sp.			R	
					Urdia Cillians	✓		O	
					Aquepecten regulus	✓		R	
					Marthasterias Glas.	✓		O	
cnidarians: hydroids, anemones, corals,					sea squirts				
Cerantus Lloydii	✓		O		Ascidiella aspersa	✓		C	
Cyanea capillata.	✓	R	R.		Ascidia Mentula	✓	C	O	
Actinia equina	✓	R			Corella parallelogramma	✓		O	
					Diplosoma Spongyforme	✓		O	
					Ascidia Virginea	✓		R	
					fishes				
					Gobiuscus flavescens	✓		O	
					Pomatochistus Pictus	✓		O	
worms					Gadus Morhua	✓		R	
Teribellid worm	✓		C		Pholis gunnellus	✓		R	
Chaetopterus	✓		O		[illegible]				
Spirorbis sp.	✓	F			Pollachius Virens	✓	F		
crustaceans					seaweeds				
Pagurus sp.	✓		O		Laminaria hyperborea	✓	C	F	
Liocarcinus depurator	✓		R		Saccharina latissima	✓	C	F	
Macropodia sp.	✓		O		Dictyota dichotoma	✓		R	
Inachus sp.	✓		R		Corda filum	✓		F	
Necora Puber	✓		O		PEA Pink encrusting	✓	F		
					Fucus Serratus	✓	F		
molluscs									
Gibbula Magus	✓		O						
Philine aperta	✓		C						
Aeolobranchus Membranaceus	✓		R						
Pecten Maximus	✓		O						
Turritella sp.	✓		O		other or continuations				
White Aeolidia?	✓		R						
bryozoans									
					Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

(10)

SEASEARCH SURVEY FORM

Form No (leave blank) SW18-109

seasearch
www.seasearch.org.uk

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

Validated by CP	Date 29/10/18	Entered by	Date	MR Reference
Recorder leave blank - for Seasearch use				

Your details

[redacted]

Dive/Site details

Site name North of Sròn na Mùil Mòire / alias a' Mhuil Chaisteil					
General location West side of Tanera Mòr, Summer Isles, Highland.					
Position (degrees and decimal minutes – state if in any other format)					
	Latitude		Longitude		W or E
Centre of site	58°	00.530	05°	~~25~~ .283	W
For drift dives From	°	.	°	.	
To	°	.	°	.	

Or OS Grid Reference

Position derived from: (circle) GPS Chart OS map Web mapping

GPS Datum (circle) (WGS84) / OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☑ sheltered ☐ v sheltered ☐ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☑ v. weak ☐

Date of dive:	23 dd / 09 mm / 2018 yy
Start of dive:	15 : 17 (24hr)
Dive duration:	40 (mins)
Sea temperature:	12 °c
Underwater visibility:	15 m
Drift dive?	yes / (no)
Night dive?	yes / (no)

Did you or your buddy take any of the following?

photographs	yes / no
video footage	(yes) / no
specimens	yes / no
seaweeds for pressing	yes / no

For the area surveyed, what was

the shallowest depth? (m)	6	bsl		bcd
the deepest depth? (m)	21	bsl		bcd
Tidal correction to chart datum				m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

Bedrock cliff to 12m, then gentle ~~shelly~~ slope on shelly sand to 15m then steeper boulder slope to limits of survey at 21m. Large Parastichopus tremulus at 19m, large numbers of Munida rugosa amongst boulders at 18m. Fish farm to NW.

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Rocky reef with L. hyperborea

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

Hard sand with cobbles and boulders in bands. red algae on boulders

Biotope Code

Seabed type: rock ☐ boulders ☑ cobbles ☑ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☑ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

1	2	3	
	m		**DEPTH LIMITS**
0	10		Upper (from sea level) (i.e. minimum)
10	21		Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
100			Bedrock type?:
			Boulders - very large > 1.0 m
	10		- large 0.5 - 1.0 m
	28		- small 0.25 - 0.5 m
	10		Cobbles (fist - head size)
			Pebbles (50p - fist size)
			Gravel - stone
			- shell fragments
	40		Sand - coarse
	10		- medium
	10		- fine
			Mud
			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
			Other (state)
100	100	100	**Total**

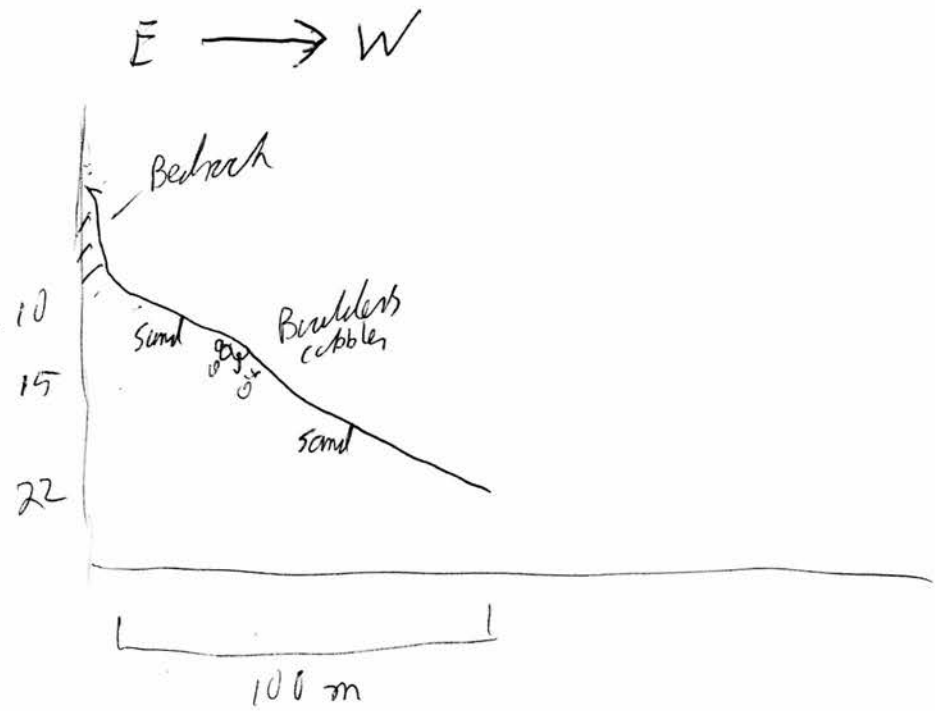
1	2	3	
	1-5		**FEATURES - ROCK (all categories)**
4			Relief of habitat (even - rugged)
2			Texture (smooth - pitted)
1			Stability (stable - mobile)
1			Scour (none - scoured)
2			Silt (none - silted)
2			Fissures > 10 mm (none - many)
2			Crevices < 10 mm (none - many)
rt	2		Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
			Mounds / casts
	✓		Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

	1-5		**FEATURES – SEDIMENT (2)**
	2		Firmness (firm - soft)
	2		Stability (stable - mobile)
	2		Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

	ph	1	2	3
sponges				
cnidarians: hydroids, anemones, corals,				
~~Antedon bifida~~				
Obelia geniculata		F		
~~Astropecten irregularis~~				
~~Luidia ciliaris~~				
worms				
Reef worms		F		
Lanice conchilega		F		
crustaceans				
Munida rugosa			F	
molluscs				
Gibbula cineraria		O		
Pecten maximus			O	
bryozoans				
Membranipora membranacea		F		

	ph	1	2	3
echinoderms				
Antedon bifida		F	[illegible]	
Luidia ciliaris		[illegible]	O	
Psammechinus pulchellus			R	
Asterias rubens		O	O	
Marthasterias glacialis		[illegible]	O	
Ophiura ophiura			O	
Ophiura albida			O	
Echinus esculentus		[illegible]	O	
Parastichopus tremulus			R	
sea squirts				
Diplosoma sp	[illegible]	O		
Ascidiella aspersa		[illegible]	F	
fishes				
Pollachius pollachius		[illegible]	F	
Pollachius virens		[illegible]	F	
Gobiusculus flavescens	[illegible]	O		
Labrus bergylta	[illegible]	O		
Pholis gunnellus		[illegible]	R	
seaweeds				
Laminaria hyperborea	[illegible]	A		
Saccorhiza polyschides	[illegible]	C		
Filamentous reds		[illegible]		
encrusting pink	[illegible]	C		
other or continuations				
Astropecten irregularis				
Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

16 11

SEASEARCH SURVEY FORM

Form No (leave blank) SW18-108

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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Validated by O.P	Date 29/10/14	Entered by	Date	MR Reference

Recorder leave blank - for Seasearch use

Your details

[redacted]

Dive/Site details

Site name En a Ehuic (EHUIC)

General location Summer Isles, Wester Ross, Highland Region

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	0	.	0	.	
For drift dives From	58 0	01.050	05 0	25.431	W
To	58 0	00.858	05 0	25.557	W

Or OS Grid Reference

Position derived from: (circle) GPS / Chart / OS map / Web mapping

GPS Datum (circle) WGS84 / OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☑ v sheltered ☐ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☑ 1-3kt ☐ <1kt ☐ v. weak ☐

Date of dive: 23 dd / 09 mm / 18 yy

Start of dive: 14:31 (24hr)

Dive duration: 43 (mins)

Sea temperature: 12 °c

Underwater visibility: 5 m

Drift dive? yes / (no)

Night dive? yes / (no)

Did you or your buddy take any of the following?

photographs (yes) / no

video footage yes / (no)

specimens yes / (no)

seaweeds for pressing yes / (no)

For the area surveyed, what was

the shallowest depth? (m) 1.0 bsl ☐ bcd

the deepest depth? (m) 8.5 bsl ☐ bcd

Tidal correction to chart datum ☐ m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

a) Drop onto pale, coarse sand/gravel/shell fragment near flat sea bed with mobile echinoderms, crabs, kelp mixed low red/green algae.

b) Stalked jelly.

c) No litter

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Steep slope of large boulders against bedrock wall. Kelp park at base rapidly becoming kelp forest. DMF & plumose with P.E.A and urchins.

Biotope Code

Seabed type: rock ☐ boulders ✓ cobbles ✓ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ✓ mixed seaweeds ✓ seagrass bed ☐ enc pink algae ✓

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

Near flat seabed of pale sand (coarse) / gravel / shell fragments. Kelp and mixed low sea weeds. Starfish & crabs feeding across.

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ✓ sand ✓ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ✓ mixed seaweeds ✓ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ✓ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

Rock sand

1	2	3	
m			**DEPTH LIMITS**
1.0	2.0		Upper (from sea level) (i.e. minimum)
7.0	8.5		Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
30			Bedrock type?:
50			Boulders - very large > 1.0 m
20			- large 0.5 - 1.0 m
			- small 0.25 - 0.5 m
			Cobbles (fist - head size)
			Pebbles (50p - fist size)
	30		Gravel - stone
	50		- shell fragments
	20		Sand - coarse
			- medium
			- fine
			Mud
			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
			Other (state)
100	100	100	**Total**

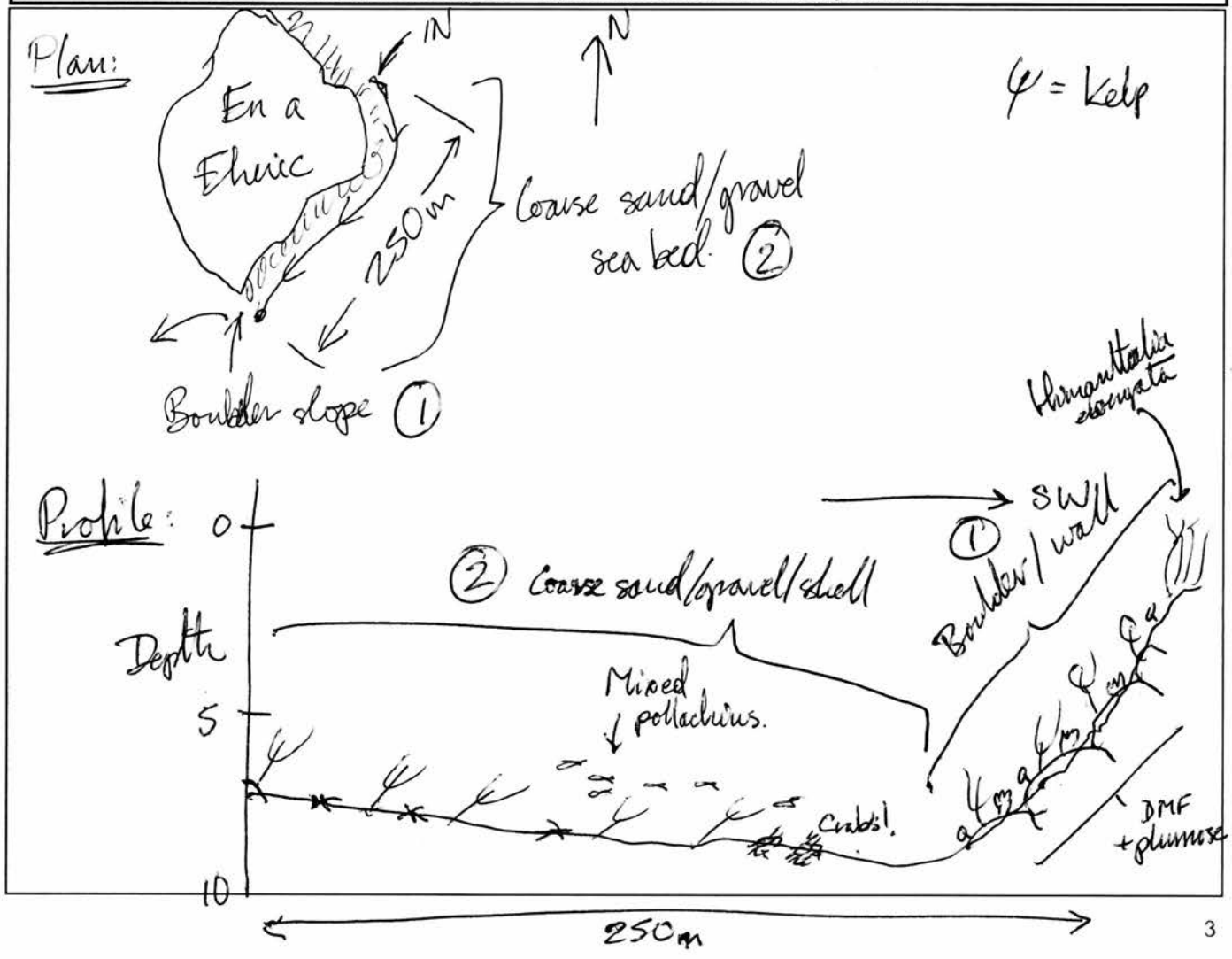
1	2	3	
1-5			**FEATURES - ROCK (all categories)**
3			Relief of habitat (even - rugged)
2			Texture (smooth - pitted)
1			Stability (stable - mobile)
1			Scour (none - scoured)
1			Silt (none - silted)
3			Fissures > 10 mm (none - many)
2			Crevices < 10 mm (none - many)
2			Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
	✓		Mounds / casts
	✓		Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

	1-5		**FEATURES – SEDIMENT (2)**
	2		Firmness (firm - soft)
	3		Stability (stable - mobile)
	3		Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

rock sand

	ph	1	2	3		ph	1	2	3
sponges					echinoderms				
					Marthasterias Glas.	✓	O	O	
					Asterias Rubens	✓	O	O	
					Aequipecten Irregularis	✓		R	
					Luidia ~~sarsi~~ ciliaris	✓		O	
					Echinus esculentus	✓	F		
					Henrica sp.	✓	R		
					~~Antedon bifida~~	~~✓~~		~~F~~	
cnidarians: hydroids, anemones, corals,					sea squirts				
Cerianthus Lloydii	✓		C		Ascidiella aspersa	✓	F	C	
Lucernariopsis Cruciformis	✓		R		Diplosoma Spongy	✓	F	F	
Metridium dianthus	✓	O			~~Ascidia virginea~~	✓		R	
elst									
Alcyonium digitatum	✓	O							
					fishes				
					Pollachius Virens	✓		C	
					Callionymus Lyra	✓		R	
worms					Pollachius Pollachius	✓		C	
Lanice Conchilega	✓		O		Pholis gunnellus	✓		R	
Spirobranchus	✓		O						
crustaceans					seaweeds				
Necora Puber	✓	O	O		Laminaria hyperborea	✓	A	C	
Cancer Pagarus	✓	R	O		Saccharina latissima	✓	A	C	
Hyas Araneas	✓	R			Alva Sp	✓		O	
Pagarus Sp	✓		O		PEA	✓	C		
					Porphyra sp.	✓		R	
					Dilsea Carnosa	✓		R	
					Scinia sp.	✓		R	
					Ulva	✓	O		
molluscs					Himanthalia elongata	✓	F		
Gibbula Cineraria	✓		O						
Calliostoma Zizyphinum	✓		O						
Lucina Vinata	✓		O						
Scallop Sp. (Juvenile)	✓		R						
Pecten Maximus	✓		R		other or continuations				
bryozoans									
Membranipora Membranacea	✓		C						
Electra Pilosa	✓		F						
					Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

Thank you for completing this form

All that's left for you to do is to either hand it to the Dive Organiser or fold it into thirds along the dotted lines, tuck one part into the other, add a stamp and send it off.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. It will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public. If you do not agree with this use of the data do not submit the form.

for Seasearch use only	validated by	O.P	date	24/10/18
	entered by		date	
	MarRec No			

first fold

Please affix stamp here

Seasearch
Marine Conservation Society
Unit 3, Wolf Business Park
Alton Road
Ross-on-Wye
Herefordshire
HR9 5NB

second fold and tuck in

seasearch
www.seasearch.org.uk

Seasearch is a joint project co-ordinated by the Marine Conservation Society and supported by: The Wildlife Trusts, Natural England, Countryside Council for Wales, Scottish Natural Heritage, Northern Ireland Environment Agency, Joint Nature Conservation Committee, Environment Agency, Marine Biological Association (*MarLIN*), British Sub-Aqua Club, Professional Association of Diving Instructors, Scottish Sub-Aqua Club, Sub-Aqua Association, Irish Underwater Council and the Nautical Archaeology Society.

Record no (recorder leave blank) SW18-107

Seasearch Observation Form

seasearch
www.seasearch.org.uk

This form asks for two types of information from your dive - **what the seabed was like** and **what marine life you saw.** Please read the guidance notes before completing the form. By completing this form you will be adding to our knowledge of the marine environment - helping it to remain fit for life!

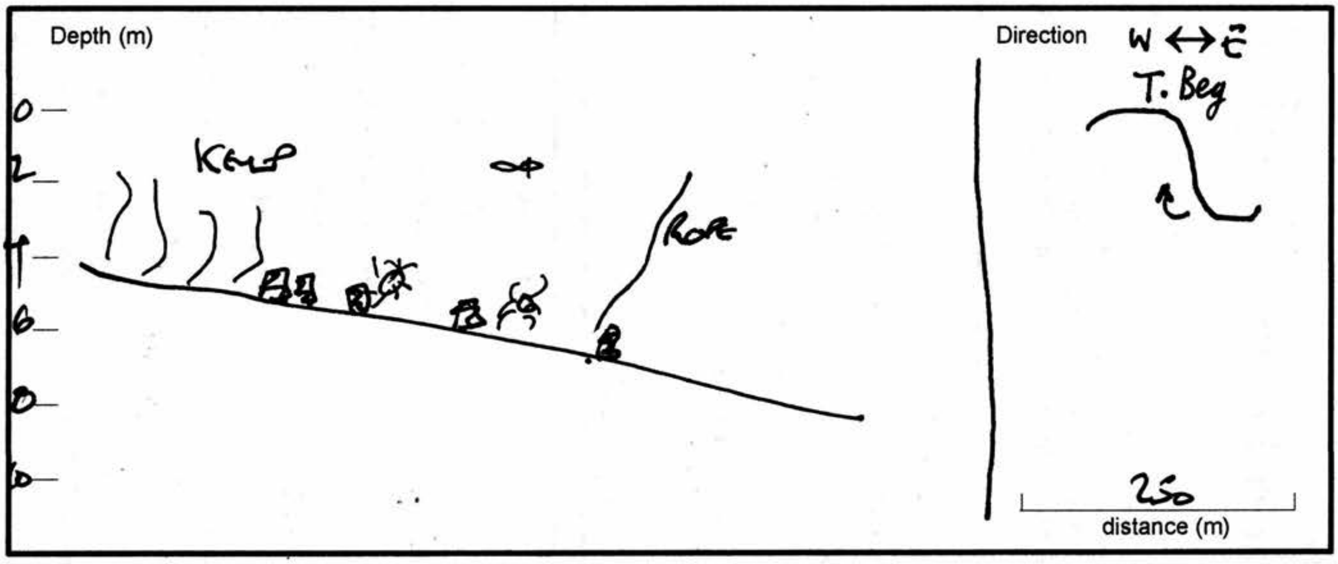
Please complete the following sections in a black pen and BLOCK CAPITALS

[redacted]

Site Name MALE BOAT TANKA BEG.	**Date of Dive** 23 / 09 / 18
	Start of dive 11 : 15 (24hr)
	Dive duration 40 (mins)
General Location (inc county) Summer Isles. Highland Region	**Max depth of survey** 10 m
	Sea Temperature 12 °C
	U/W visibility 8 m
Position at start of dive (degrees & decimal minutes only) 58 ° 05.298 N 5 ° 26.483 W or E	**or OS Grid Reference** 2 letters (1 in Ireland), 6 numbers
Position derived from (circle) (GPS) Chart OS Map Web mapping site	**Drift dive?** yes / (no) **Night dive?** yes / (no)
Did you take any photographs? (yes) / no **or video footage?** (yes) / no	

SO1-01/10

Description of the seabed
Please draw an approximate profile of the seabed (i.e. a side-on view), labeling features and dominant forms as appropriate. Remember to show the depth range, direction and a distance scale.



Types of seabed present: (please tick all that you saw and circle the dominant one)

Rocky Reef	Boulders	Cobbles and Pebbles	Mixed Ground	Sand and Gravel	Mud	Wreckage	Other
☐	☑	☐	☑	☑ (circled)	☐	☐	☐

Did you notice anything unusual or noteworthy about the seabed or the marine life?

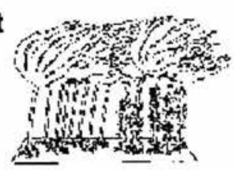
Was there any litter or were there any man-made objects apparent?

~~[crossed out]~~ OLD ROPE

What marine life did you see on your dive?

Seabed cover types (tick all those present)

Kelp forest ☐

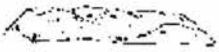


Kelp park ☑

Mixed seaweeds ☐

Encrusting pink algae ☐

Barren sediment (no life or structures apparent) ☐

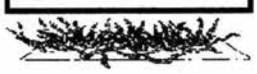


Animal turf on rocks

☐ **Short**

☐ **Tall**

Animal Beds (e.g. mussels, brittlestars, scallops - state which) ☐



Sediment with life apparent (tubes, burrows etc) ☐

Illustrations by Bob Foster-Smith

Species you saw
Show abundance of each species as Rare, Occasional, Common, or if you're unsure, Present.

Species	R, O, C or P
ASCIDIELLA ASPERSA	C
Lui.ai. CILIARIS	O
PEA Pink encrusting Algae	C
ECHINUS	~~[crossed out]~~ C
CALLIOSTOMA ZIZIPHINUM	C
GALATHEA SP	~~C~~
SAGARTIA TROGLODYTES	C
GIBBULA UMBILICALIS	O
CHANGA LAMARCKII	R
BOTRYLLUS SP	O
LAMINARIA HYPERBOREA	C
~~[crossed out]~~ SACCORHIZA	O
LANICE CONCHILEGA	O
PORANIA PULVILLUS	R
MACROPODIA SP	R
NECORA PUBER	O
PALMARUS SP	R
ANTEDON BIFIDA	C
POMATOSCHISTUS PICTUS	O
CHITON	R
MARTHA STELLUS	R

LUCERNARIOPSIS
CHAX MELITENSIS R
TAURULUS BUBALIS R
ALCYONIUM DIGITATUM O
CANCER PAGURUS O

Pbs 15 ©

SEASEARCH SURVEY FORM

Form No (leave blank) SW15/106

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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Validated by	Date	Entered by	Date	MR Reference
Recorder leave blank - for Seasearch use				

Your details

[redacted]

Dive/Site details

Site name: South bay - Tanera Beg

General location: Mol[redacted] Bheag
Summer Isles, Wester Ross, Highland Region.

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	°	.	°	.	
For drift dives From	58°	00.282	05°	26.563	W
To	58°	00.328	05°	26.461	W

Or OS Grid Reference:

Position derived from: (circle) GPS / Chart / OS map / Web mapping

GPS Datum (circle) WGS84 / OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☑
mod exposed ☐ sheltered ☐ v sheltered ☐ ext sheltered ☐

Max tidal stream:
>6kt ☐ 3-6kt ☐ 1-3kt ☑ <1kt ☐ v. weak ☐

Date of dive: 23 dd / 09 mm / 18 yy

Start of dive: 10:30 (24hr)

Dive duration: 34 (mins)

Sea temperature: 12 °c

Underwater visibility: 8 m

Drift dive? yes / (no)

Night dive? yes / (no)

Did you or your buddy take any of the following?

photographs (yes) / no
video footage yes / (no)
specimens yes / (no)
seaweeds for pressing yes / (no)

For the area surveyed, what was

the shallowest depth? (m) 4.0 bsl ☐ bcd

the deepest depth? (m) 15.8 bsl ☐ bcd

Tidal correction to chart datum ☐ m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

a) boulder slope (backed by bedrock wall) down to coarse sand/gravel seabed (not surveyed). Covered by kelp forest above 10-12m.

b) 15 spined stickle back + stalked jelly.

c) None

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Boulder slope with kelp cover – Laminaria saccha + Laminaria hyperborea.

Biotope Code

Seabed type: rock ☐ boulders ✓ cobbles ✓ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other

Communities: kelp forest ✓ kelp park ✓ mixed seaweeds ✓ seagrass bed ☐ enc pink algae ✓

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

Boulders

1	2	3	
	m		**DEPTH LIMITS**
4.0			Upper (from sea level) (i.e. minimum)
15.8			Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
			Bedrock type?:
80			Boulders - very large > 1.0 m
15			- large 0.5 - 1.0 m
5			- small 0.25 - 0.5 m
			Cobbles (fist - head size)
			Pebbles (50p - fist size)
			Gravel - stone
			- shell fragments
			Sand - coarse
			- medium
			- fine
			Mud
			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
			Other (state)
100	100	100	**Total**

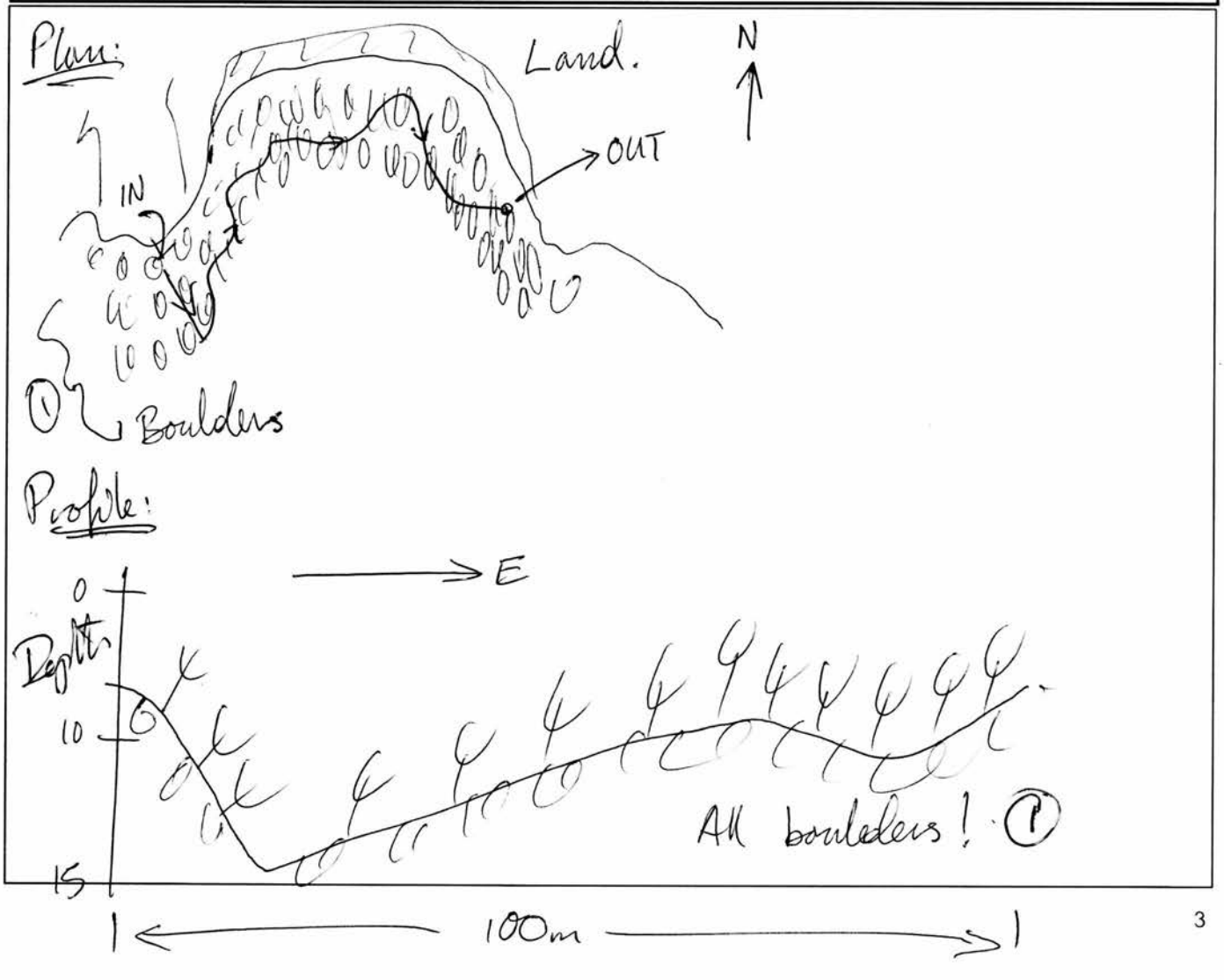
1	2	3	
	1-5		**FEATURES - ROCK (all categories)**
3			Relief of habitat (even - rugged)
2			Texture (smooth - pitted)
1			Stability (stable - mobile)
1			Scour (none - scoured)
1			Silt (none - silted)
4			Fissures > 10 mm (none - many)
1			Crevices < 10 mm (none - many)
2			Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
			Mounds / casts
			Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

	1-5		**FEATURES – SEDIMENT (2)**
			Firmness (firm - soft)
			Stability (stable - mobile)
			Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

Boulders

	ph	1	2	3		ph	1	2	3
sponges					echinoderms				
					Echinus esculentus	✓	F		
					Asterias Rubens	✓	O		
					Martha Stellas Gla.	✓	O		
					Porania Pulvillus	✓	R		
cnidarians: hydroids, anemones, corals,					sea squirts				
Obelia geniculata.	✓	C			Diplosoma Spongyforn	✓	F		
Lucernariopsis Campanulatus	✓	O							
Aurelia Aurita	✓	O							
					fishes				
					Phynorhombus norvegicus	✓	R		
					Gobiusculus flavescens	✓	F		
worms					Spinachia Spinachia	✓	R		
					Pollachius Pollachius	✓	F		
					Pollachius virens	✓	C		
crustaceans					seaweeds				
Cancer Pagurus	✓	O			Laminaria hyperborea	✓	A		
Necora Puber	✓	O			Saccharina latissima	✓	A		
Homarus Gammarus	✓	R			PEA encrusting	✓	A		
					PEA encrusting	✓	C		
molluscs									
Gibbula Cinneria	✓	F							
Calliostoma Zizyphinum	✓	O							
Gibbula umbilicalis	✓	O							
Lacuna Vincta	✓	O							
					other or continuations				
bryozoans									
Membranipora membranacea	✓	C							
Electra pilosa	✓	F							
					Continue on a separate sheet if you need to				

Once completed return the form to the Dive Organiser or to Seasearch, Marine Conservation Society, Over Ross House, Ross Park, Ross-on-Wye, Herefordshire, HR9 7QQ.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. They will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public through the Seasearch and NBN websites. If you do not agree with this use of the data do not submit the form.

Thank you for completing this form

All that's left for you to do is to either hand it to the Dive Organiser or fold it into thirds along the dotted lines, tuck one part into the other, add a stamp and send it off.

Your contact details will be included on the Seasearch database and those of partner organisations and will be used to send you information about Seasearch and associated projects. It will not be passed to third parties without your consent. The location, dive details, habitats and species information and the name of the recorder will be entered into a database and made available to the participating organisations and the general public. If you do not agree with this use of the data do not submit the form.

for Seasearch use only	validated by	JT	date	26/9/14
	entered by		date	
	MarRec No			

first fold

Please affix stamp here

Seasearch
Marine Conservation Society
Over Ross House, Ross Park
Ross-on-Wye
Herefordshire
HR9 7QQ

second fold and tuck in

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www.seasearch.org.uk

Seasearch is a joint project co-ordinated by the Marine Conservation Society and supported by: The Wildlife Trusts, Natural England, Countryside Council for Wales, Scottish Natural Heritage, DOE Northern Ireland, Joint Nature Conservation Committee, Environment Agency, Marine Biological Association, British Sub-Aqua Club, Professional Association of Diving Instructors, Scottish Sub-Aqua Club, Sub-Aqua Association, Irish Underwater Council and the Nautical Archaeology Society.

Record no (recorder leave blank) SW18/105

(HP)

Seasearch Observation Form

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This form asks for two types of information from your dive - **what the seabed was like** and **what marine life you saw.** Please read the guidance notes before completing the form. By completing this form you will be adding to our knowledge of the marine environment - helping it to remain fit for life!

Please complete the following sections in a black pen and BLOCK CAPITALS

[redacted]

Site Name ANCHORAGE BAY TANERA MOR	**Date of Dive** 22/9/18
	Start of dive 13:30 (24hr)
	Dive duration 140:00 (mins)
General Location (inc county) Easy Eileanan Sùn Summer Isles	**Max depth of survey** 9.1 m
	Sea Temperature 11 °C
	U/W visibility 8 m

Position at start of dive (degrees & decimal minutes only) **or OS Grid Reference**

58 ~~00.64~~ N 5 ~~23.163~~ W or E

2 letters (1 in Ireland), 6 numbers

Position at end of dive (if different only)

58 00.847 N 5 23.163 W ~~or E~~

Position derived from (circle)

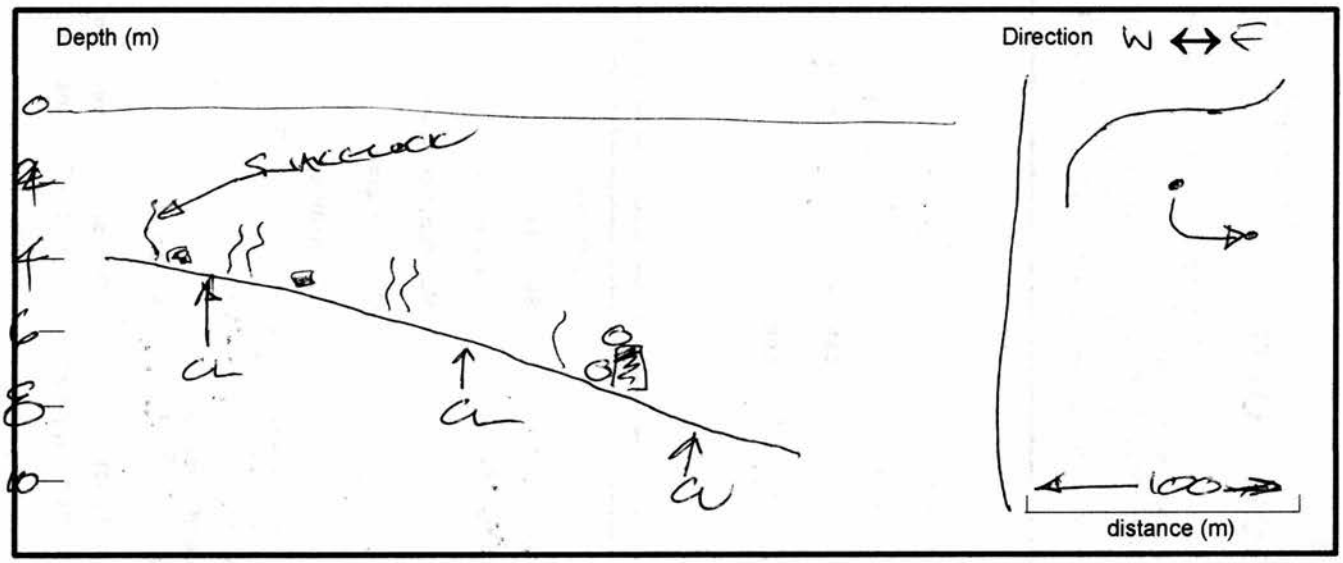
(GPS) Chart OS Map Web mapping site

Drift dive? yes / (no)

Night dive? yes / (no)

Did you take any photographs? (yes) no **or video footage?** yes (no)

Description of the seabed
Please draw an approximate profile of the seabed (i.e. a side-on view), labelling features and dominant forms as appropriate. Remember to show the depth range, direction and a distance scale.



Types of seabed present: (please tick all that you saw and circle the dominant one)

Rocky Reef	Boulders	Cobbles and Pebbles	Mixed Ground	Sand and Gravel	Mud	Wreckage	Other
☐	☒	☐	☐	☒	☐	☐	☐

Did you notice anything unusual or noteworthy about the seabed or the marine life?

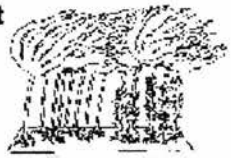
Was there any litter or were there any man-made objects apparent?

NONE

What marine life did you see on your dive?

Seabed cover types (tick all those present)

☐ **Kelp forest**



☒ **Kelp park**

☒ **Mixed seaweeds**

☐ **Seagrass Bed**

☒ **Encrusting pink algae**

Other - specify

☐ _____

☐ **Animal turf on rocks**

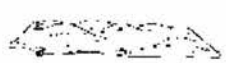
☐ **Short**

☐ **Tall**

☐ **Animal Beds**
(e.g. mussels, brittlestars, scallops - state which)

☒ **Sediment with life apparent**
(tubes, burrows etc)

☐ **Barren sediment**
(no life or structures apparent)



Illustrations by Bob Foster-Smith

Species you saw
Show abundance of each species as **R**are, **O**ccasional, **C**ommon, or if you're unsure, **P**resent.

Species	R, O, C or P
KELP	O
PLOCAMIUM SP	O
ANGULATA VULGARIS	O
CERAMIUM NODOSUM	C
ULVA	O
BOTRYLLUS SP	R
TUBULARIA	R
MARGELOPSIS	O
CIONA INTESTINALIS	O
ASCIDIELLA ASPERSA	C
ANTHOPLEURA BALII	C
ASTROPECTEN IRREGULARIS	O
POLYCARPA PULVINUS	R
FLABELLINA ESCULENTUS	R
ALCYONIDIUM SP	R
NUCULA PUSA	C
NUCULA SP	C
STOMATIA PHENODYRS	O
LIMEA CONSTRICTA	R
PECTEN SP	C
TUBULARIA	R

ASTERIAS RUBENS O
CANCER PAGURUS O
PECTEN MAXIMUS R

14 (3)

SEASEARCH SURVEY FORM

Form No (leave blank) SW18/104

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

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Validated by	Date	Entered by	Date	MR Reference
Recorder leave blank - for Seasearch use				

Your details

[redacted]

Dive/Site details

Site name: Tanera Mor anchorage.

General location: West Tanera Mor, Summer Isles, Wester Ross, Highland Region

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	0	.	0	.	
For drift dives From	58°	00.935	05°	23.927	
To	58°	00.969	05°	24.009	

Or OS Grid Reference:

Position derived from: (circle) GPS / Chart / OS map / Web mapping

GPS Datum (circle) WGS84 / OSGB36

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☐ v sheltered ☑ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☐ v. weak ☑

Date of dive:	22 dd / 09 mm / 18 yy
Start of dive:	12:21 (24hr)
Dive duration:	29 (mins)
Sea temperature:	12 °C
Underwater visibility:	8 m
Drift dive?	yes / no
Night dive?	yes / no

Did you or your buddy take any of the following?

photographs	yes / no
video footage	yes / no
specimens	yes / no
seaweeds for pressing	yes / no

For the area surveyed, what was

the shallowest depth? (m)	5.0	bsl	bcd
the deepest depth? (m)	12.2	bsl	bcd
Tidal correction to chart datum			m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

a) Silt/sand slope with low algae cover, scattered wreckage forming raised habitat for anemones etc.

b) Anthopleura balli + ~~Actinothoe sphyrodeta~~ Sargatiogeton laceratus. Lesser spotted ~~catshark~~.

c) Rowing boat, cloth, boxes, cod with spinal damage.

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Sand/silt slope. Burrowing anemones & algae (mostly kelp) overgrowth with many, mainly ascidia ascidians

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☑ mud ☑ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☑ mixed seaweeds ☑ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☑ barren sediment ☐

2. DESCRIPTION (physical + community)

Wreckage – scattered debris. Rowing boat, steel boxes, lost rope mooring, live mooring. Mostly supporting kelp & deep rope with multiple anemones species.

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☑ other ☐

Communities: kelp forest ☐ kelp park ☑ mixed seaweeds ☑ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

slope wreck

1	2	3	
	m		**DEPTH LIMITS**
~~5.0~~	5.0		Upper (from sea level) (i.e. minimum)
12.2	5.0		Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

	%		**SUBSTRATUM**
			Bedrock type?:
			Boulders - very large > 1.0 m
			- large 0.5 - 1.0 m
			- small 0.25 - 0.5 m
			Cobbles (fist - head size)
5			Pebbles (50p - fist size)
10			Gravel - stone
5			- shell fragments
			Sand - coarse
10			- medium
~~35~~ 35			- fine
~~35~~			Mud
			Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
	40		Artificial - metal
			- concrete
	~~50~~		- wood
	10		Other (state) Rope
100	100	100	**Total**

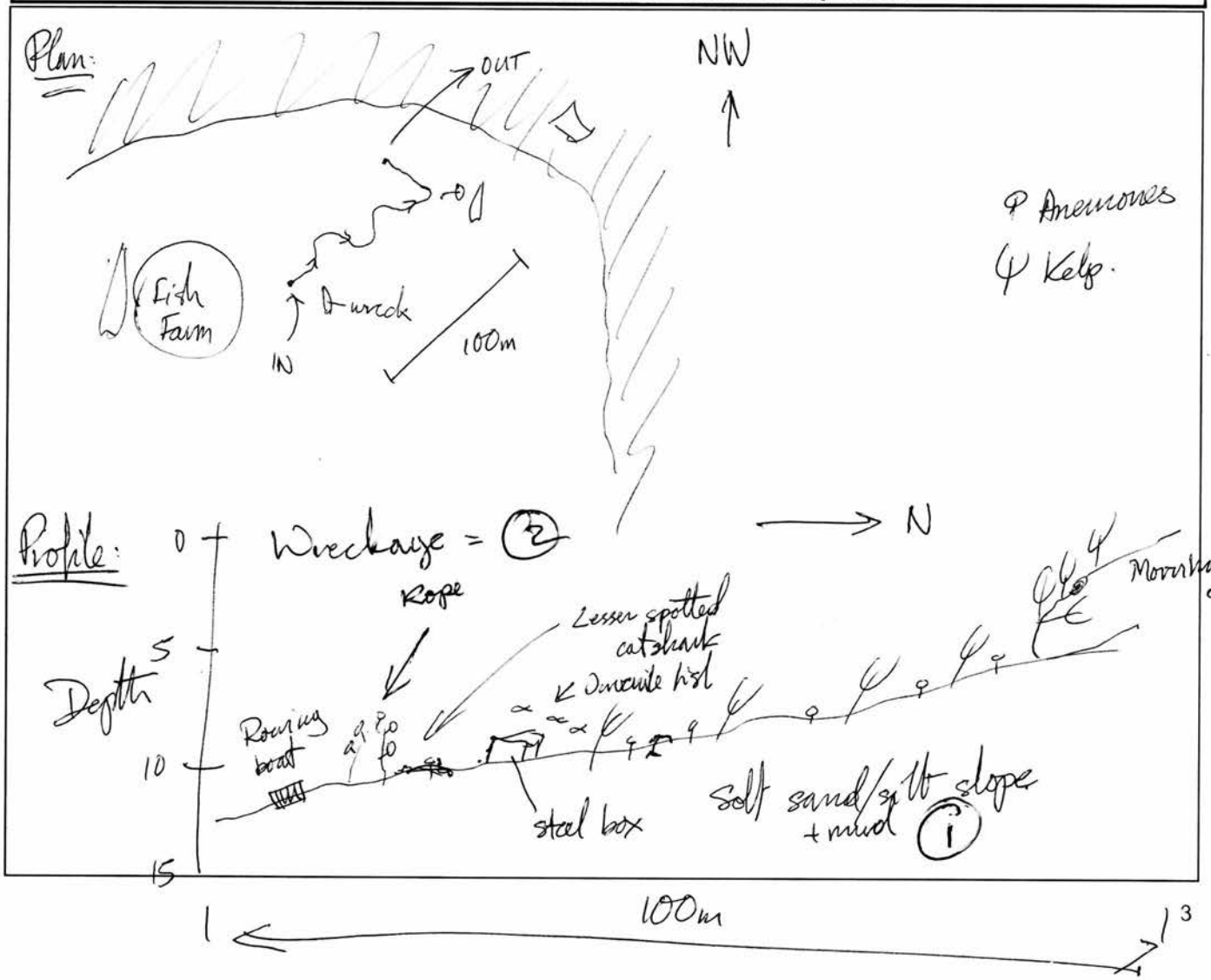
1	2	3	
	1-5		**FEATURES - ROCK (all categories)**
			Relief of habitat (even - rugged)
			Texture (smooth - pitted)
			Stability (stable - mobile)
			Scour (none - scoured)
			Silt (none - silted)
			Fissures > 10 mm (none - many)
			Crevices < 10 mm (none - many)
			Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

	✓		**FEATURES – SEDIMENT (1)**
✓			Mounds / casts
✓			Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

	1-5		**FEATURES – SEDIMENT (2)**
4			Firmness (firm - soft)
3			Stability (stable - mobile)
4			Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

slope week

	ph	1	2	3
sponges				
cnidarians: hydroids, anemones, corals,				
Ceriantipus llyodii	✓	[illegible]		
Hymedesmia dichotoma	✓		R	
Halichondria diaphanous	✓		C	
Cerianthus lloydii	✓		O	
Sagartia elegans	✓			
Sagartiogeton laceratus	✓		O	
Anthopleura ballii	✓	F		
Sertularella gayi ?	✓		O	
Halecium halecinum.	✓			
worms				
Spirorbis sp.	✓	C		
Terebellid sp.	✓	O		
crustaceans				
Cancer pagurus	✓	O	R	
Philocheras bispinosus	✓	O		
Pagurus sp.	✓	F		
Cardinus maenas	✓	O		
molluscs				
Pecten maximus	✓	O		
Archidoris pseudoargus	✓	R		
Squid eggs (clouds)	✓	R		
Gibbula cineraria	✓	F		
bryozoans				

slop week

	ph	1	2	3
echinoderms				
echinus esculentus	✓		O	
Marthasterias glacialis	✓	O		
Ophiothrix fragilis	✓		O	
Ophiura ophiura	✓	O		
Luidia ciliaris	✓	R		
Asterias rubens	✓	C		
sea squirts				
Ascidia mentula	✓	O	O	
Didemnum sp.	✓			
Didemnum albidum	✓			
Ascidia virginea	✓			
Corella parallelogramma	✓	O		
fishes				
Pomatoschistus sp.	✓			
Pollachius virens	✓	O		
Crystallogobius linearis	✓	R		
Gadus morhua (juv.)	✓	R		
[illegible] (spinally deformed	✓			
Trachurus trachurus	✓	R		
Symphodus melops	✓		R	
seaweeds				
Laminaria hyperborea	✓	C	C	
Laminaria digitata	✓	C	C	
low growing red algae	✓		C	
Ulva sp.	✓			
Chorda filum	✓	C		
Chondrus crispus (?)	✓	O		
other or continuations				
Continue on a separate sheet if you need to				

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SEASEARCH SURVEY FORM

Form No (leave blank) SV18/103

- If anything is unclear please refer to the **Guidance Notes**
- Each pair of divers should complete a form between them
- Please complete all parts of the form. Where there is a * only fill in the information if you know it.

seasearch
www.seasearch.org.uk

Validated by	Date	Entered by	Date	MR Reference
Recorder leave blank - for Seasearch use				

Your details

[redacted]

Dive/Site details

Site name Ardnagoine

General location North of Rubh Ard-na-goine
Tanera More, Summer Isles
Highland Region

Date of dive: 22 dd / 09 mm / 2018 yy

Start of dive: 12:40 (24hr)

Dive duration: 40 (mins)

Sea temperature: 12 °c

Underwater visibility: 10 m

Drift dive? yes / no

Night dive? yes / no

Position (degrees and decimal minutes – state if in any other format)

	Latitude		Longitude		W or E
Centre of site	58°	01.078	05°	23.755	W
For drift dives From	0	.	0	.	
To	0	.	0	.	

Or OS Grid Reference

Position derived from: (circle) GPS Chart OS map Web mapping

GPS Datum (circle) WGS84 OSGB36

Did you or your buddy take any of the following?

photographs	yes / no
video footage	yes / no
specimens	yes / no
seaweeds for pressing	yes / no

Exposure of site: extremely exposed ☐ v exposed ☐ exposed ☐ mod exposed ☐ sheltered ☑ v sheltered ☐ ext sheltered ☐

Max tidal stream: >6kt ☐ 3-6kt ☐ 1-3kt ☐ <1kt ☑ v. weak ☐

For the area surveyed, what was

the shallowest depth? (m)	4	bsl	bcd
the deepest depth? (m)	14	bsl	bcd
Tidal correction to chart datum			m*

Seabed summary

Summarise: a. The main features of the site, b. Any unusual features or species, c. Any human activities or impacts at the site

Kelp covered boulder and bedrock to 6m then sand with occasional outcrops of rock. Gently sloping sand below 14m with large patches of filamentous red and small L. hyperborea. Large shoals of pollack and some juvenile cod. Lots of juvenile starfish

Habitat descriptions

*Complete a box below for each **habitat** you found on your dive. Normally the shallowest habitat is No. 1 even if you have done the dive deepest first. Each written description should tally with the information entered in the columns and diagrams on the next page. If you found more than 3 habitats, continue your descriptions on another form. Tick boxes where shown, and insert percentages (they must add up to 100%) or assign a score from 1-5 as appropriate. If you are uncertain leave the box blank. The biotope code will be assigned later from your description.*

1. DESCRIPTION (physical + community)

Bedrock and boulders with kelp, encrusting pink and Echinus

Biotope Code

Seabed type: rock ✓ boulders ✓ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ✓ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ✓

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

2. DESCRIPTION (physical + community)

Gently sloping sand with occassional boulders and patches of bedrock
Abundant filamentous red

Biotope Code

Seabed type: rock ☐ boulders ✓ cobbles ☐ pebbles ☐ gravel ☐ sand ✓ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ✓ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

3. DESCRIPTION (physical + community)

Biotope Code

Seabed type: rock ☐ boulders ☐ cobbles ☐ pebbles ☐ gravel ☐ sand ☐ mud ☐ wreckage ☐ other ☐

Communities: kelp forest ☐ kelp park ☐ mixed seaweeds ☐ seagrass bed ☐ enc pink algae ☐

animal turf ☐ animal bed ☐ sediment with life ☐ barren sediment ☐

1	2	3	
m			**DEPTH LIMITS**
			Upper (from sea level) (i.e. minimum)
			Lower (from sea level) (i.e. maximum)
			Upper (from chart datum) *
			Lower (from chart datum) *

%			**SUBSTRATUM**
80			Bedrock type?:
10			Boulders - very large > 1.0 m
			- large 0.5 - 1.0 m
10			- small 0.25 - 0.5 m
			Cobbles (fist - head size)
	10		Pebbles (50p - fist size)
			Gravel - stone
			- shell fragments
	60		Sand - coarse
	10		- medium
			- fine
			Mud
	20		Shells (empty - or as large pieces)
			Shells (living - eg mussels, limpets)
			Artificial - metal
			- concrete
			- wood
			Other (state)
100	100	100	**Total**

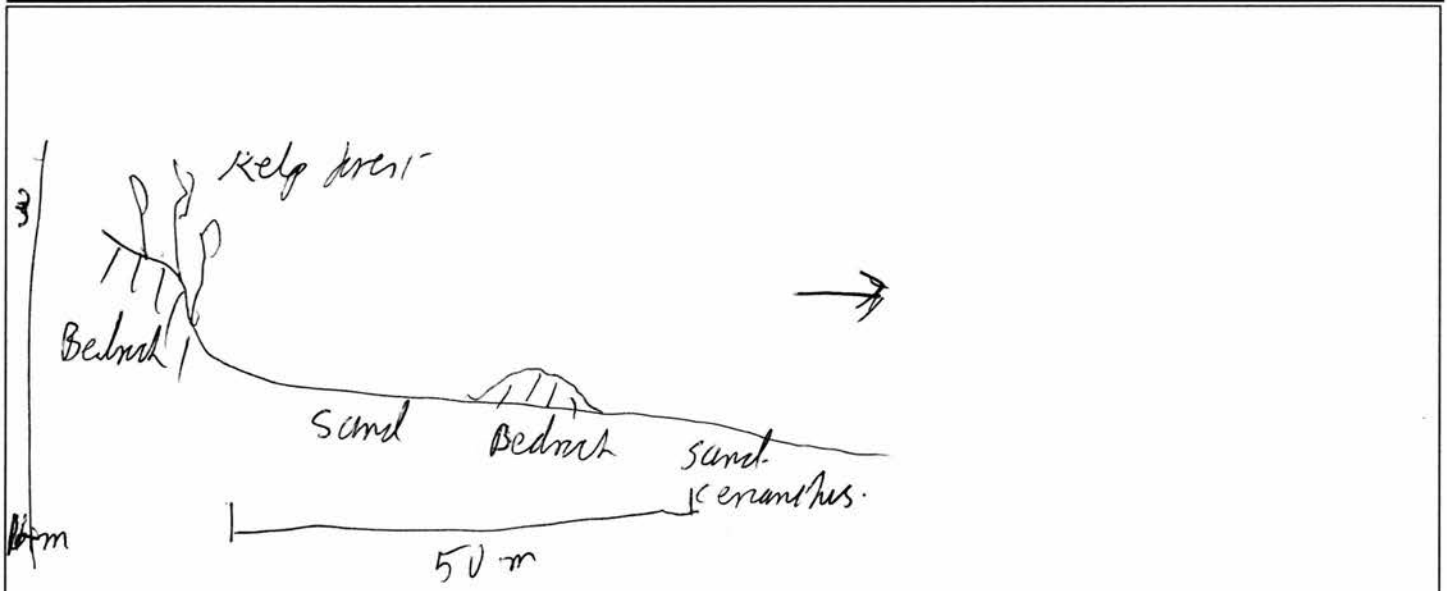
1	2	3	
1-5			**FEATURES - ROCK (all categories)**
3			Relief of habitat (even - rugged)
1			Texture (smooth - pitted)
1			Stability (stable - mobile)
1			Scour (none - scoured)
2			Silt (none - silted)
2			Fissures > 10 mm (none - many)
2			Crevices < 10 mm (none - many)
4			Boulder/cobble/pebble shape (rounded - angular)
			Sediment on rock? (tick if present)

✓			**FEATURES – SEDIMENT (1)**
			Mounds / casts
	✓		Burrows / holes
			Waves (>10 cm high)
			Ripples (< 10 cm high)
			Subsurface coarse layer?
			Subsurface anoxic (black) layer?

1-5			**FEATURES – SEDIMENT (2)**
	2		Firmness (firm - soft)
	2		Stability (stable - mobile)
	3		Sorting (well - poor)

Sketches and plans

*Draw a **profile and/or plan** of the sea bed you encountered on your dive in the space below. Mark (& number) the different habitats, corresponding to the written descriptions on p.2. Indicate conspicuous and/or characteristic species. Make sure you include **depth(s)** (vertical axis) and a **distance** scale (horizontal axis) for a profile and scale and north point for a plan. Indicate the direction of the profile or plan and the direction of any current.*



Species List

*Score the abundance of each group of animals and plants **in each habitat** alongside the name. In the blank spaces list the seaweeds & animals which you were able to identify **positively** from the different habitats. Use latin names if possible, but if you don't know them, common or descriptive names are acceptable. If you are not 100% sure about any, add a question mark. Do not enter names as guesses - it's better to exclude them than to include incorrect identifications. Give abundances in the columns: **S**uper abundant, **A**bundant, **C**ommon, **F**requent, **O**ccasional & **R**are. If you did not note abundances, simply enter a **P** for Present. Continue on a separate sheet, if necessary. If you have a photograph of the species tick the **ph** column.*

	ph	1	2	3		ph	1	2	3
sponges					echinoderms				
Suberites sp on Hermit			R		Asterias rubens		O	R	
					Marthasterias glacialis		O	O	
					Luidia ciliaris			R	
					Porania pulvillus			R	
					Ophiura ophiura			O	
					Echinus esculentus		F	O	
cnidarians: hydroids, anemones, corals,					sea squirts				
Cerianthus lloydii			F		Ascidiella aspersa		O	C	
Anthozoa sp.			R		Botryllus schlosseri		O		
					fishes				
					Gadus morhua		O		
					Pollachius pollachius			C	
worms					Ingolenys immaculatus		R		
Terebellid sp			O		Syngnathus typhle		R		
Reef worm		F			Symphodus sp		O		
Lanice conchilega			R		Corbiculus flavelicus		O		
crustaceans					seaweeds				
Necora puber		O	O		Laminaria hyperborea		C		
Cancer pagurus			O		Saccorhiza polyschides		O		
Liocarcinus depurator		O	O		Chorda filum		O		
Pagurus sp			O						
Macropodid sp			R		Encrusting pink		C		
					Filamentous red			C	
					Filamentous brown			O	
molluscs									
Ensis ensis (shells)			F						
Tumbellia (shells)			R						
Gibbula cineraria		O							
Fertilia maximus			O						
					other or continuations				
bryozoans									
					Continue on a separate sheet if you need to				

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