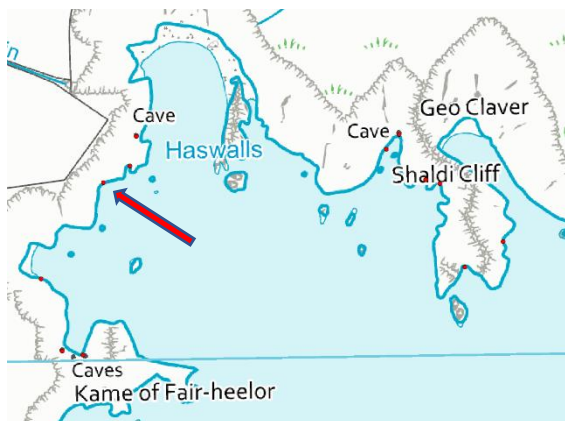


ANNEX 2 – Fair Isle cave site relocation details with physical and biological data

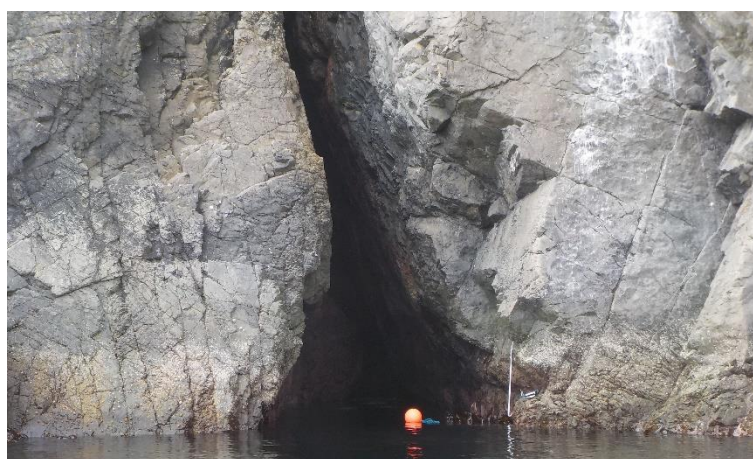
Annex 2A FI21CV01 - Heeds o Sheeldegeo (Hesswells) cave 3

Cave relocation sheet

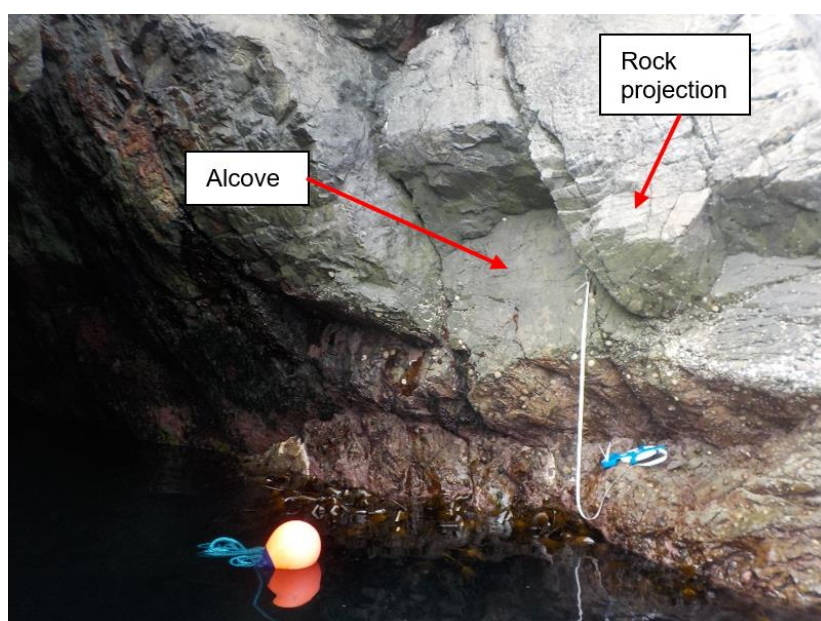
Cave name	Heeds o Sheeldegeo (Hesswells) cave 3
Site code	FI21CV01 ('A3'; 'CI45')
Position of entrance	59.525711° N 1.626548° W
How start point is marked	Galvanised relocation piton in northern (right) wall near the point of roof closure. Positioned in vertical fissure in alcove partially concealed behind rock projection. Piton at ~2.2 m ACD.
Notes on relocation	Navigate to coordinates and confirm entrance by reference to images. Examine northern (right) wall at entrance to identify alcove concealed by rock projection (see images).
Access	By boat.



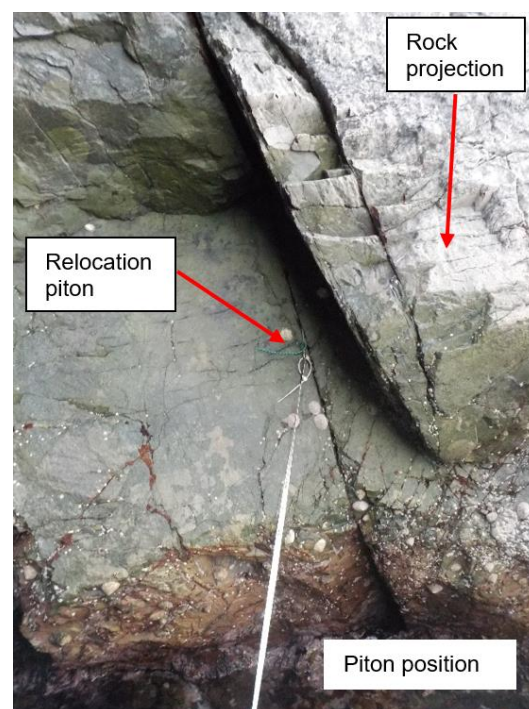
(© Crown copyright and database rights [2022] Ordnance Survey 100017908)



View of entrance from boat a short distance from shore. Tidal rise ~0.9 m



Rock features at piton placement
Tidal rise ~0.9 m



Piton position

Cave datum line relocation information

Cave name	Heeds o Sheeldegeo (Hesswells) cave 3
Site code	FI21CV01 ('A3'; 'CI45')
Position of piton 1	Almost directly below relocation piton. Distance of 4.5 m from relocation piton. Bearing 0°, depth 2.2 m BCD.

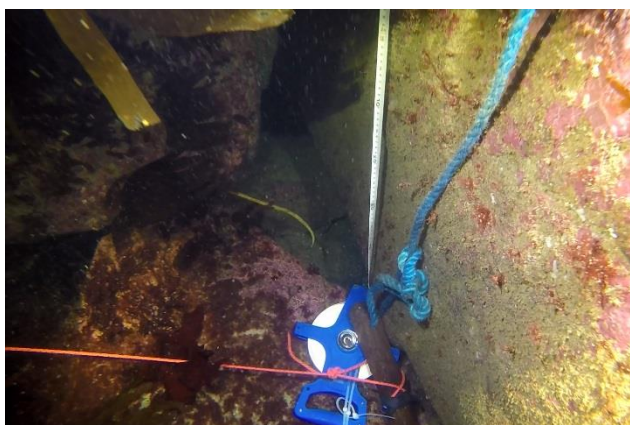
Note – Two lines were laid. The first line ran from the entrance and to the end of the northern 'side passage'. The second line ran from the 17 m mark on the first line and was laid to the end of north-west trending 'main passage'.

First line – From entrance to end of northern 'side passage'.

Piton number	Depth of Piton (metres below chart datum)	Distance (m) to next piton	Distance (m) on tape	Bearing (degrees magnetic) to next piton
Piton 1 (shot weight)	2.2	15	0	295
Piton 2 (snoopy on cobble)	0.7	2	15	330
Piton 3 (not fixed)	0.2	8	17	0
Piton 4 (not fixed)	0.1	25	25	0
Piton 5 (reel on cobble beach)	>1.0 ACD	N/A	50	N/A

Second line – From 17 m mark on the first line to the end of the NW 'main passage'.

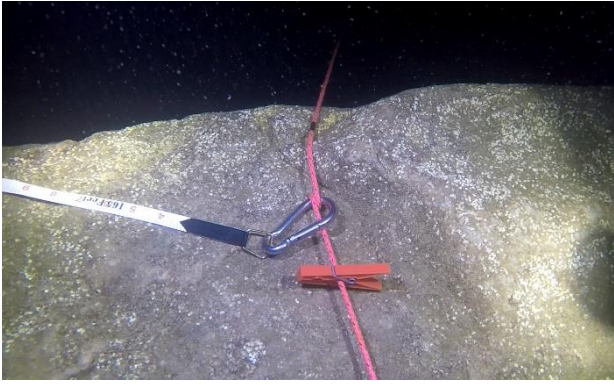
Piton number	Depth of Piton (metres below chart datum)	Distance (m) to next piton	Distance (m) on tape	Bearing (degrees magnetic) to next piton
Piton 1 (not fixed)	0.2	10	0	290
Piton 2 (not fixed)	0.5	20	10	300
Piton 3 (reel on boulder beach)	>1.0 ACD	N/A	30	N/A



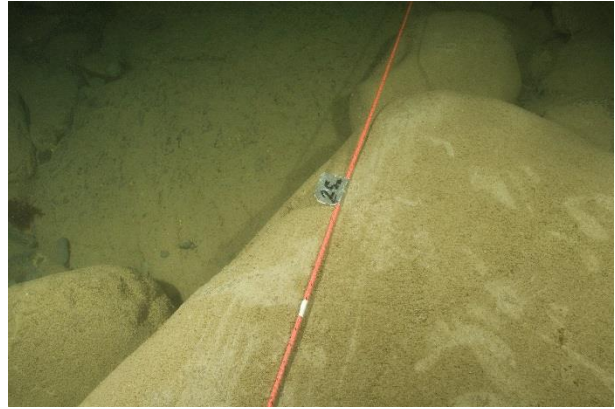
First line, Piton 1 (Line attached to shot weight)



First line, Piton 2 (snoopy on cobble)



First line, Piton 3 (not fixed)



First line, Piton 4 (not fixed)



First line, Piton 5 (reel on cobble beach)



Second line, Piton 1 (not fixed)

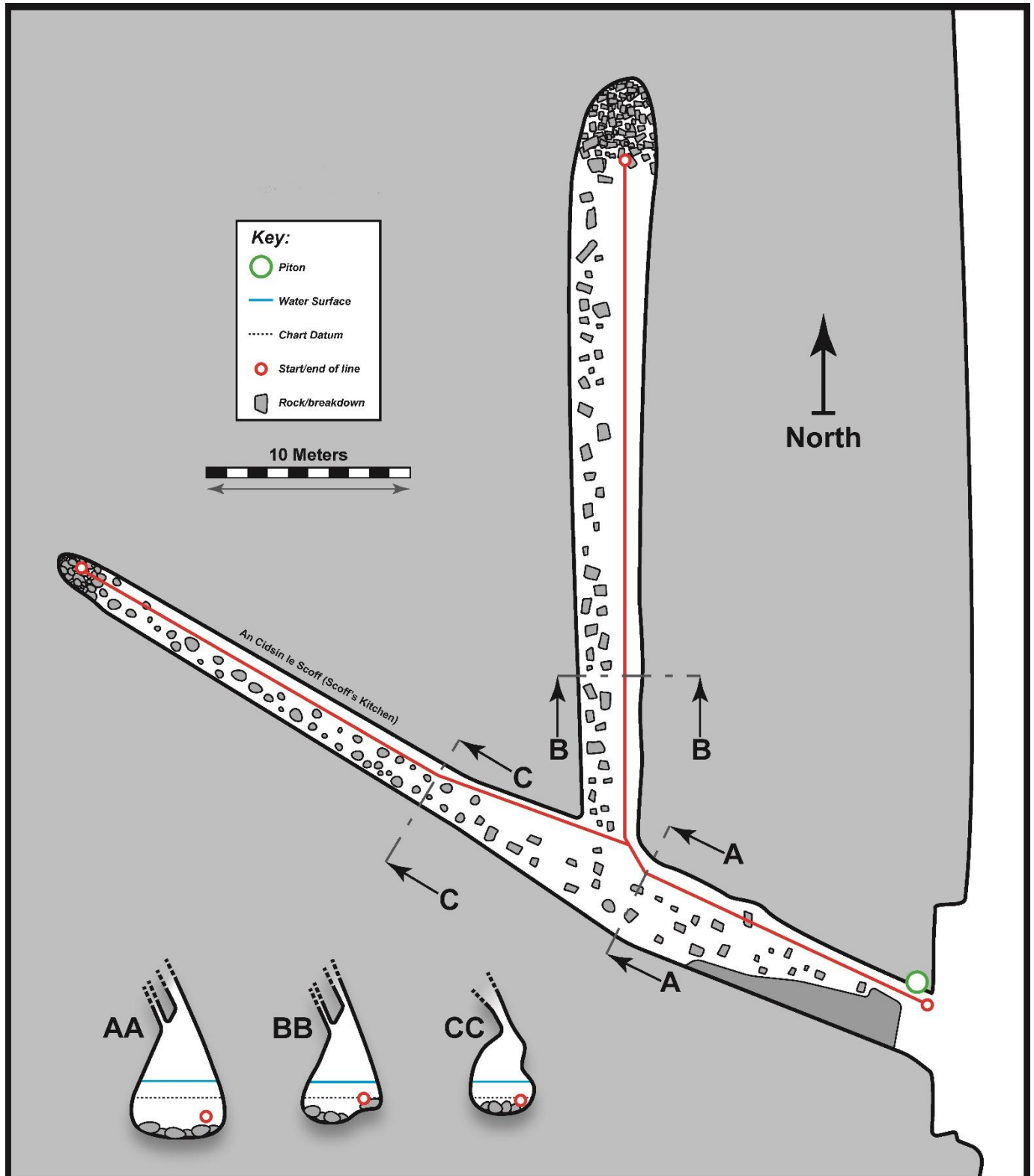


Second line, Piton 2 (not fixed)



Second line, Piton 3 (reel on boulder beach)

FI21CV01 - Heeds o Sheeldegeo (Hesswells) cave 3 ('A3'; 'CI45') – Physical survey



Scale bar applies to both floor plan and passage cross sections. 'AA' is cross section 1, 'BB' is cross section 2 and 'CC' is cross section 3.

FI21CV01 - Heeds o Sheeldegeo (Hesswells) cave 3 ('A3'; 'CI45') – Biological summary – cross section 1 (right wall, ~15 m from entrance, 15 m on main tape)

Zone	Physical notes	Upper limit (m CD)	Lower limit (m CD)	Biological notes	Biotope
1	Cave floor of rounded boulders and cobbles.	-1.9	-2.2	Sparse biota with occasional <i>Fabricia stellaris</i> tube turf, rare <i>Spirorbis tridentatus</i> and sponge crusts.	IR.FIR.SG.CC.Mo
2	Vertical to slightly overhanging cave wall.	+1.2	-2.0	Biota sparse near base of wall, becoming increasingly abundant with height above floor. <i>Fabricia stellaris</i> tube turf common becoming abundant on upper wall. <i>Grantia compressa</i> common on upper wall. <i>Leuconia</i> (?) crusts occasional becoming frequent on upper wall. <i>Spirorbis tridentatus</i> occasional.	IR.FIR.SG.CC.BalPom

FI21CV01 - Heeds o Sheeldegeo (Hesswells) cave 3 ('A3'; 'CI45') – Biological summary – cross section 2 (left wall, ~25 m from entrance, 25 m on main tape)

Zone	Physical notes	Upper limit (m CD)	Lower limit (m CD)	Biological notes	Biotope
1	Cave floor of rounded boulders and cobbles and base of rock wall to ~0.5 m above floor.	-0.7	-1.2	Sparse biota. <i>Fabricia stellaris</i> tube turf frequent, <i>Spirorbis tridentatus</i> rare and <i>Actinia equina</i> frequent amongst boulders.	IR.FIR.SG.CC.Mo
2	Vertical to slightly overhanging cave wall.	+1.2	-0.7	<i>Fabricia stellaris</i> tube turf abundant becoming superabundant on upper wall. <i>Grantia</i> common, <i>Halichondria</i> and <i>Spirorbis tridentatus</i> rare.	IR.FIR.SG.CC.BalPom

FI21CV01 - Heeds o Sheeldegeo (Hesswells) cave 3 ('A3'; 'CI45') – Biological summary – cross section 3 (left wall, ~27 m from entrance, 10 m on left branch tape)

Zone	Physical notes	Upper limit (m CD)	Lower limit (m CD)	Biological notes	Biotope
1	Cave floor of rounded boulders and cobbles. Drift algae present...	-0.7	-0.7	Sparse biota, rock surfaces appear smooth & bare. <i>Fabricia stellaris</i> tube turf and <i>Spirorbis tridentatus</i> rare. <i>Actinia equina</i> locally abundant between boulders.	IR.FIR.SG.CC.Mo
2	Vertical to slightly overhanging cave wall.	0	-0.7	Scoured lower wall. <i>Fabricia stellaris</i> tube turf frequent but restricted to crevices, <i>Spirorbis tridentatus</i> rare.	IR.FIR.SG.CC.Mo
3	Vertical to slightly overhanging cave wall.	+1.2	0	<i>Fabricia stellaris</i> tube turf superabundant, <i>Grantia</i> abundant, <i>Leucosolenia</i> sp. and <i>Spirorbis tridentatus</i> rare.	IR.FIR.SG.CC.BalPom