

VII. APPENDIX A

Logistical Support Element

The Island of Jura is an island famed for its whisky and the literary past associated with George Orwell. In fact, George Orwell resided at Barnhill, in the years 1945-1948. Barnhill is the island home of the land tenants (the Fletchers), with whom I had to seek permission to conduct the fieldwork.

With four months of daily experience within the Gulf of Corryvreckan, it was decided early on, that the only option for the fieldwork was to be based on Jura. Scarba held the steepest and highest slopes over the channel but they were too little on account of the subsequent loss of visibility to distance. These slopes also offered little in mind of good flat and well-protected pitches for the tents. With south facing slopes, it also meant the predominant wind directions (West and South) were unbroken. Other factors such as safe landing areas and freshwater access soon confirmed Jura as the prime location.

The first trip was a 36-hour reconnaissance in late March. I stayed at the Kinuachdrachd bunkhouse having been dropped on the island by Farsain Cruises. This first trip was to get a feel for the area, identify any potential viewing points and pitch locations. The weather was unimpressive with low cloud hampering visibility of the waters below. However, plans were committed to paper and the ball was rolling.

The second trip was a pilot study in the first week of April, which involved basic camping equipment and the V22 theodolite kit. This time, Seafari Adventures dropped me on the rocks of Pig Bay, on the western side of the Jura. Over-ambitiousness and steep, demanding terrain meant the first 24 hours on the island was primarily kit transportation (this was a recurring theme for the whole project!). A suitable pitch was found on some flat ground on the upper slopes of the northern point of Jura. Decent ground was a rarity, with ground comprising of either rock, coarse heather or boggy grass; none of which are good for pitching. The weather was atrocious with little data

recorded and after the fourth night (near-gale force winds and heavy rain denied any sleep), it was decided that more could be achieved in the inviting and stable accommodation of Oban. Although lacking in data, the pilot study fulfilled its aim of preparing for the main project.



Figure 9. The total kit weighed approximately 1000lbs, and took six trips from Kinuachdrachd to Garbh Leitir, a round trip of 6 km each time.

Embarkation was set for the 1st of May. The accommodation comprised of two tents: one 9'x9' canvas tent, for administrative duties and a 'Vango Force 10', for sleeping. The list below details all the equipment used.

Table 12. Kit List

<u>Tents</u>	<u>Food/Cooking</u>	<u>Field Equipment</u>
9x9 tent	Tinned food	Theodolite
9x9 poles	Dried Fruit	Tripod
9x9 pegs	Energy bars	Camcorder
9x9 tarp	Cooker	Charging units
Vango tent	Gas Canister	Camera
Vango poles	Table	Digital Camera
Vango pegs	Kettle	Anemometer
Vango tarp	Saucepan	Camera tripod
Extra guylines	Can opener	Compact tripod
Spinny tape	Whisperlite	Telescope
Gaffer tape	Fuel bottle	High vis. vest
Sleeping bag	Lighter/matches	VHF handheld
Toilet	Basin	Mobile phone
Toilet paper	Washing liquids	PDA + Keyboard
		Solar panel + batteries
		Dictator phone + microphone
<u>Personal</u>	<u>First Aid/ Toiletries</u>	<u>Stuff</u>
Waterproofs Jkts (2)	Toothpaste	Reading Books (3)
Waterproof Trsrs	Floss	Papers + Index Cards
Trousers (3)	Toothbrush	Waterproof Paper
Boots (2)	Antihistamine	Pens/Pencils
Socks (8)	Eye drops	Letter
Pants (5)	Sutcher scissors	
T-shirts (5)	Contact lenses + solution	
Jumper (1)	FirstAid kit	
Waistcoat (1)	Chlorine	
Snugpak (1)	Babywipes	
Hat (2)	Soap	
Scarf (1)	Midge spray	
Poncho (1)	Vitamins	
Gloves (2)		
Boot Cream		

There were two occasions when I travelled off the island. The first was in response to mobile phone battery failure. This was due to the solar charger and its fascinating knack of drawing energy 'out' of the phone. To prevent failure of the 'Safety Net', alternative charging units were sought and a cycle of weekly 'charging' trips to

Mike Richardson ensued. The second trip regarded a food re-stock, and was delayed because Seafari could not guarantee access. The Seafari rigid inflatable boats were able to pick me up off the shore near to my encampment. Farsain was better utilised for times that were inappropriate for Seafari.



Figure 10. The large tent to the left was used for administration and contained a desk, chair, storage and cooking facilities. The smaller tent was accommodation and contained only a camp bed, sleeping bag and pillowcase (no space to carry a pillow in so a big jumper sufficed).

Project time arrived, and I departed for Jura. Seafari dropped me, and half a ton of kit, at Kinuachdrachd pier. Mike Richardson provided transport to his house and storage of kit, and I departed for the area in the early evening of 1st May. I found a well-positioned Northeast facing pitch, just above an established burn. The next day, I set about moving the kit from Kinuachdrachd to my new location, at Garbh Leitir. At a height of 100m, I had a clear view to the North and East. The kit movement took five return

journeys, each approximately 6 kilometres in length, and involved pack weights nearing 150lbs.



Figure 11. The set-up at the viewpoint, showing the scope, mount and theodolite. The view looks northeast with the southwest tip of Scarba in the background.

Setting up camp took two days and fieldwork commenced on the fourth day. The weather was pretty dismal, and when there was not rain the cliff top viewpoint succumbed to the cold westerly winds. The fieldwork demanded more from me mentally than physically, although a miscalculation in rations meant the first weeks were spent eating frugally. The mental despair was associated with how to capture the activity I saw ahead of me. I had reference papers that allowed me define my method but I could not decide the finer details of when to stop sampling because the wind was too high, or it was about to rain. My confidence developed and after a minor scare, when I cooked a tin of beans but forgot to put water in the pan (the entire inside of the tent was covered in baked beans and pork sausage!); I departed to Oban for one day to recharge (myself and my mobile), restock and re-think. I purchased a scope that allowed clarification of distant sightings, bought more food, especially granola bars and sought a little light reading.

The second week developed much better and my routine started to develop. Fresh water came from a nearby stream. Water for drinking was sterilised with chlorine tablets. The chemical toilet worked exceedingly well allowing for clean and comfortable service. A basin of hot water allowed for personal cleaning and clothes could be hung to dry inside the tent.

Contact was strictly maintained twice a day, with Seafari Adventures in the morning and Mike Richardson in the evening, in accordance with the risk assessment. I recharged my mobile phone with Mike Richardson once a week and used a spare during these times.

All in all, the logistical element was highly successful, and personally, a defining moment in my life.

Jim Elliott

APPENDIX B

Observation Timings

Median Tide Times	Tide	Set-up	Start Observing	Start Recording Seabirds	Stop Recording Seabirds	Start Recording Cetaceans	Stop Recording Cetaceans	Start Recording Seabirds	Stop Recording Seabirds	Start Recording Cetaceans	Stop Recording Cetaceans	Start Recording Seabirds	Stop Recording Seabirds	Start Recording Cetaceans	Stop Recording Cetaceans
04-May-04	ET	9:39 AM	9:54 AM	10:19 AM	10:24 AM	10:34 AM	10:39 AM	10:49 AM	10:54 AM	11:04 AM	11:09 AM	11:19 AM	11:24 AM	11:34 AM	11:39 AM
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VII. Appendices

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26-May-04	ET	2:32 PM	2:47 PM	3:12 PM	3:17 PM	3:27 PM	3:32 PM	3:42 PM	3:47 PM	3:57 PM	4:02 PM	4:12 PM	4:17 PM	4:27 PM	4:32 PM
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27-May-04	FT	9:41 AM	9:56 AM	10:21 AM	10:26 AM	10:36 AM	10:41 AM	10:51 AM	10:56 AM	11:06 AM	11:11 AM	11:21 AM	11:26 AM	11:36 AM	11:41 AM
27-May-04	HW	12:43 PM	12:58 PM	1:23 PM	1:28 PM	1:38 PM	1:43 PM	1:53 PM	1:58 PM	2:08 PM	2:13 PM	2:23 PM	2:28 PM	2:38 PM	2:43 PM
27-May-04	ET	3:49 PM	4:04 PM	4:29 PM	4:34 PM	4:44 PM	4:49 PM	4:59 PM	5:04 PM	5:14 PM	5:19 PM	5:29 PM	5:34 PM	5:44 PM	5:49 PM
28-May-04	LW	8:04 AM	8:19 AM	8:44 AM	8:49 AM	8:59 AM	9:04 AM	9:14 AM	9:19 AM	9:29 AM	9:34 AM	9:44 AM	9:49 AM	9:59 AM	10:04 AM
28-May-04	FT	11:02 AM	11:17 AM	11:42 AM	11:47 AM	11:57 AM	12:02 PM	12:12 PM	12:17 PM	12:27 PM	12:32 PM	12:42 PM	12:47 PM	12:57 PM	1:02 PM
28-May-04	HW	2:03 PM	2:18 PM	2:43 PM	2:48 PM	2:58 PM	3:03 PM	3:13 PM	3:18 PM	3:28 PM	3:33 PM	3:43 PM	3:48 PM	3:58 PM	4:03 PM
28-May-04	ET	5:07 PM	5:22 PM	5:47 PM	5:52 PM	6:02 PM	6:07 PM	6:17 PM	6:22 PM	6:32 PM	6:37 PM	6:47 PM	6:52 PM	7:02 PM	7:07 PM
29-May-04	LW	9:10 AM	9:25 AM	9:50 AM	9:55 AM	10:05 AM	10:10 AM	10:20 AM	10:25 AM	10:35 AM	10:40 AM	10:50 AM	10:55 AM	11:05 AM	11:10 AM
29-May-04	FT	12:09 PM	12:24 PM	12:49 PM	12:54 PM	1:04 PM	1:09 PM	1:19 PM	1:24 PM	1:34 PM	1:39 PM	1:49 PM	1:54 PM	2:04 PM	2:09 PM
29-May-04	HW	3:10 PM	3:25 PM	3:50 PM	3:55 PM	4:05 PM	4:10 PM	4:20 PM	4:25 PM	4:35 PM	4:40 PM	4:50 PM	4:55 PM	5:05 PM	5:10 PM
30-May-04	LW	10:05 AM	10:20 AM	10:45 AM	10:50 AM	11:00 AM	11:05 AM	11:15 AM	11:20 AM	11:30 AM	11:35 AM	11:45 AM	11:50 AM	12:00 PM	12:05 PM
30-May-04	FT	1:05 PM	1:20 PM	1:45 PM	1:50 PM	2:00 PM	2:05 PM	2:15 PM	2:20 PM	2:30 PM	2:35 PM	2:45 PM	2:50 PM	3:00 PM	3:05 PM
30-May-04	HW	4:06 PM	4:21 PM	4:46 PM	4:51 PM	5:01 PM	5:06 PM	5:16 PM	5:21 PM	5:31 PM	5:36 PM	5:46 PM	5:51 PM	6:01 PM	6:06 PM
31-May-04	ET	7:47 AM	8:02 AM	8:27 AM	8:32 AM	8:42 AM	8:47 AM	8:57 AM	9:02 AM	9:12 AM	9:17 AM	9:27 AM	9:32 AM	9:42 AM	9:47 AM
31-May-04	LW	10:53 AM	11:08 AM	11:33 AM	11:38 AM	11:48 AM	11:53 AM	12:03 PM	12:08 PM	12:18 PM	12:23 PM	12:33 PM	12:38 PM	12:48 PM	12:53 PM
31-May-04	FT	1:53 PM	2:08 PM	2:33 PM	2:38 PM	2:48 PM	2:53 PM	3:03 PM	3:08 PM	3:18 PM	3:23 PM	3:33 PM	3:38 PM	3:48 PM	3:53 PM
31-May-04	HW	4:55 PM	5:10 PM	5:35 PM	5:40 PM	5:50 PM	5:55 PM	6:05 PM	6:10 PM	6:20 PM	6:25 PM	6:35 PM	6:40 PM	6:50 PM	6:55 PM

VII. Appendices

01-Jun-04	ET	8:31 AM	8:46 AM	9:11 AM	9:16 AM	9:26 AM	9:31 AM	9:41 AM	9:46 AM	9:56 AM	10:01 AM	10:11 AM	10:16 AM	10:26 AM	10:31 AM
01-Jun-04	LW	11:36 AM	11:51 AM	12:16 PM	12:21 PM	12:31 PM	12:36 PM	12:46 PM	12:51 PM	1:01 PM	1:06 PM	1:16 PM	1:21 PM	1:31 PM	1:36 PM
01-Jun-04	FT	2:36 PM	2:51 PM	3:16 PM	3:21 PM	3:31 PM	3:36 PM	3:46 PM	3:51 PM	4:01 PM	4:06 PM	4:16 PM	4:21 PM	4:31 PM	4:36 PM
01-Jun-04	HW	5:40 PM	5:55 PM	6:20 PM	6:25 PM	6:35 PM	6:40 PM	6:50 PM	6:55 PM	7:05 PM	7:10 PM	7:20 PM	7:25 PM	7:35 PM	7:40 PM
02-Jun-04	ET	9:14 AM	9:29 AM	9:54 AM	9:59 AM	10:09 AM	10:14 AM	10:24 AM	10:29 AM	10:39 AM	10:44 AM	10:54 AM	10:59 AM	11:09 AM	11:14 AM
02-Jun-04	LW	12:19 PM	12:34 PM	12:59 PM	1:04 PM	1:14 PM	1:19 PM	1:29 PM	1:34 PM	1:44 PM	1:49 PM	1:59 PM	2:04 PM	2:14 PM	2:19 PM
02-Jun-04	FT	3:21 PM	3:36 PM	4:01 PM	4:06 PM	4:16 PM	4:21 PM	4:31 PM	4:36 PM	4:46 PM	4:51 PM	5:01 PM	5:06 PM	5:16 PM	5:21 PM
03-Jun-04	ET	9:57 AM	10:12 AM	10:37 AM	10:42 AM	10:52 AM	10:57 AM	11:07 AM	11:12 AM	11:22 AM	11:27 AM	11:37 AM	11:42 AM	11:52 AM	11:57 AM
03-Jun-04	LW	1:03 PM	1:18 PM	1:43 PM	1:48 PM	1:58 PM	2:03 PM	2:13 PM	2:18 PM	2:28 PM	2:33 PM	2:43 PM	2:48 PM	2:58 PM	3:03 PM
03-Jun-04	FT	4:05 PM	4:20 PM	4:45 PM	4:50 PM	5:00 PM	5:05 PM	5:15 PM	5:20 PM	5:30 PM	5:35 PM	5:45 PM	5:50 PM	6:00 PM	6:05 PM
04-Jun-04	ET	10:41 AM	10:56 AM	11:21 AM	11:26 AM	11:36 AM	11:41 AM	11:51 AM	11:56 AM	12:06 PM	12:11 PM	12:21 PM	12:26 PM	12:36 PM	12:41 PM
04-Jun-04	LW	1:48 PM	2:03 PM	2:28 PM	2:33 PM	2:43 PM	2:48 PM	2:58 PM	3:03 PM	3:13 PM	3:18 PM	3:28 PM	3:33 PM	3:43 PM	3:48 PM
04-Jun-04	FT	4:53 PM	5:08 PM	5:33 PM	5:38 PM	5:48 PM	5:53 PM	6:03 PM	6:08 PM	6:18 PM	6:23 PM	6:33 PM	6:38 PM	6:48 PM	6:53 PM

APPENDIX C*Seafari Sightings 2003*

	Bottlenose Dolphin	Harbour Porpoise	Minke Whale	Sei Whale
Total	16	532	21	1
April	4	12	0	0
May	0	6	0	0
June	4	67	3	0
July	7	125	4	1
August	1	211	1	0
September	0	66	13	0
October	0	50	0	0
November	0	1	0	0

Bird Report 2003

Species seen by crew of Seafari. Compiled by Duncan Lang.

Merlin	Red Throated Diver
Peregrine Falcon	Great Northern Diver
Ringed Plover	Storm Petrel
Turnstone	Manx Shearwater
Oyster Catcher	Fulmar
Curlew	Cormorant
Knot	Shag
Redshank	Gannet
Common Sandpiper	Grey Heron
Dunlin	Mute Swan
Great Skua	Greylag Goose
Arctic Skua	Mallard
Greater Black Backed Gull	Widgeon
Lesser Black Backed Gull	Teal
Herring Gull	Eider Duck
Common Gull	Shelduck
Kittiwake	Red Breasted Merganser
Black Headed Gull	Hen Harrier
Sandwich Tern	Buzzard
Arctic & Common Terns	Sparrowhawk
Little Tern	Golden Eagle
Razorbill	White-tailed Sea Eagle
Common Guillemot	Kestrel
Black Guillemot	
Puffin	

APPENDIX D*Meteorological Data*

Date- Time	Wind Direction	Wind Speed	Sea State	Swell Height	Visibility	Precipitation	Cloud Cover	Notes
3 May 2004 10:00	NW	5	3	0	GOOD	SQUALLS	8	-
3 May 2004 17:00	W	3	2	0	GOOD	-	4	SUNNY
4 May 2004 10:00	NW	4	2	0	GOOD	SHOWERS	6	-
4 May 2004 17:00	NW	5	2	0	GOOD	SQUALLS	4	-
5 May 2004 10:00	NE	3	2	0	MODERATE	SHOWERS	8	-
5 May 2004 17:00	NW	5	3	0	MODERATE	RAIN	5	-
6 May 2004 10:00	E	1	1	0	GOOD	-	1	SUNNY
6 May 2004 18:00	E	1	1	0	GOOD	-	4	RAIN EARLIER
7 May 2004 10:00	NE	1	1	0	GOOD	-	2	SUNNY
7 May 2004 15:00	NW	3	3	0	GOOD	-	5	-
8 May 2004 10:00	W	2	2	0	POOR	RAIN	8	-
8 May 2004 18:00	W	2	1	0	GOOD	-	7	OVERCAST
9 May 2004 10:00	SW	2	1	0	MODERATE	-	6	OVERCAST
9 May 2004 17:00	W	5	3	0	GOOD	-	5	RAIN IMMINENT
10 May 2004 10:00	W	2	1	0	BAD	-	8	FOG
10 May 2004 16:00	W	7	3	0	GOOD	-	2	WINDY
11 May 2004 10:00	-	-	1	0	BAD	-	8	FOG
11 May 2004 16:00	W	5	2	0	GOOD	-	8	COLD
12 May 2004 10:00	NW	1	1	0	MODERATE	-	2	SUNNY
12 May 2004 17:00	W	4	2	0	GOOD	-	8	LOW CLOUD
13 May 2004 10:00	-	1	?	?	BAD	DRIZZLE	8	-
13 May 2004 17:00	W	3	2	0	POOR	-	8	LOW CLOUD
14 May 2004 0:00	X	X	X	X	X	X	X	X
14 May 2004 10:00	-	?	?	?	BAD	-	8	LOW CLOUD
15 May 2004 0:00	X	X	X	X	X	X	X	X
15 May 2004 0:00	X	X	X	X	X	X	X	X
16 May 2004 0:00	W	3	2	0	GOOD	-	7	-
16 May 2004 17:00	W	3	2	0	GOOD	-	7	-
16 May 2004 19:00	W	6	4	0	MODERATE	-	7	-
17 May 2004 10:00	SW	3	2	0	POOR	DRIZZLE	8	-
17 May 2004 12:30	SW	6	4	0	GOOD	-	1	-
17 May 2004 15:30	SW	6	2	0	MODERATE	-	6	WINDY
18 May 2004 10:00	SW	6	4	0	POOR	-	8	-
18 May 2004 17:00	SW	8	6	0	BAD	-	8	GALES
19 May 2004 10:30	W	5	2	0	MODERATE	-	7	-
19 May 2004 13:30	W	4	2	0	MODERATE	-	7	-
19 May 2004 16:45	W	5	2	0	GOOD	-	5	-
20 May 2004 11:00	W	4	2	0	GOOD	-	3	-
20 May 2004 14:00	W	5	3	0	GOOD	-	1	WINDY
20 May 2004 17:00	NW	7	3	0	GOOD	-	1	WINDY
21 May 2004 8:30	E	2	2	0	MODERATE	-	6	-
21 May 2004 11:30	NE	1	1	0	GOOD	-	1	-
21 May 2004 14:30	W	2	2	0	GOOD	-	1	-
21 May 2004 17:30	NW	2	2	0	EXCELLENT	-	CLEAR	-
22 May 2004 9:00	NE	1	1	0	GOOD	-	1	-
22 May 2004 12:00	NW	2	1	0	EXCELLENT	-	CLEAR	-
22 May 2004 15:00	W	3	1	0	GOOD	-	CLEAR	-
22 May 2004 18:30	W	4	2	0	GOOD	-	CLEAR	-
23 May 2004 9:30	E	1	1	0	GOOD	-	1	-
23 May 2004 12:30	SW	3	1	0	GOOD	-	3	-
23 May 2004 16:00	W	5	2	0	GOOD	-	2	-
24 May 2004 10:00	W	4	3	0	POOR	DRIZZLE	8	-

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24 May 2004 13:30	W	6	2	0	GOOD	-	4	-
24 May 2004 16:30	NW	5	2	0	MODERATE	-	8	BAD LIGHT
25 May 2004 11:00	NW	2	1	0	GOOD	-	8	-
25 May 2004 14:00	W	3	1	0	GOOD	-	4	-
25 May 2004 17:00	W	4	1	0	EXCELLENT	-	2	-
26 May 2004 9:00	NE	2	1	0	MODERATE	-	1	-
26 May 2004 12:00	E	2	2	0	MODERATE	-	3	-
26 May 2004 15:00	SE	2	1	0	GOOD	-	4	-
27 May 2004 7:30	SE	2	1	0	GOOD	-	CLEAR	-
27 May 2004 10:00	E	4	1	0	GOOD	-	3	-
27 May 2004 13:00	E	2	1	0	EXCELLENT	-	CLEAR	-
27 May 2004 16:30	E	3	2	0	GOOD	-	2	-
28 May 2004 8:30	SE	4	2	0	POOR	DRIZZLE	8	-
28 May 2004 11:30	SE	4	3	0	POOR	DRIZZLE	8	-
28 May 2004 14:30	SE	7	5	0	POOR	DRIZZLE	8	-
28 May 2004 17:30	SE	6	4	0	POOR	DRIZZLE	8	-
29 May 2004 9:30	E	1	1	0	MODERATE	-	8	-
29 May 2004 12:30	S	2	1	0	MODERATE	-	8	-
29 May 2004 15:30	E	1	2	0	GOOD	-	1	-
30 May 2004 10:30	SE	2	1	0	POOR	-	8	-
30 May 2004 13:30	SE	3	2	0	MODERATE	-	4	-
30 May 2004 16:30	SE	2	2	0	GOOD	-	1	-
31 May 2004 8:30	E	3	1	0	MODERATE	-	CLEAR	-
31 May 2004 11:30	NE	2	1	0	GOOD	-	CLEAR	-
31 May 2004 14:30	E	1	1	0	EXCELLENT	-	2	-
31 May 2004 17:30	W	1	1	0	GOOD	-	CLEAR	-
1 June 2004 9:00	W	1	1	0	POOR	RAIN	8	-
1 June 2004 12:00	W	1	1	0	MODERATE	-	8	-
1 June 2004 15:00	W	5	2	0	MODERATE	-	1	-
1 June 2004 18:00	W	7	3	0	MODERATE	-	1	-
2 June 2004 10:00	W	4	1	0	GOOD	-	1	-
2 June 2004 13:00	W	3	2	0	GOOD	-	3	-
2 June 2004 16:00	W	3	1	0	GOOD	-	8	-
3 June 2004 10:30	SW	3	?	0	BAD	RAIN	8	-
3 June 2004 13:30	SW	3	2	0	BAD	-	8	LOW CLOUD
3 June 2004 16:30	SW	3	1	0	POOR	-	8	-
4 June 2004 11:00	W	6	2	0	MODERATE	-	8	-
4 June 2004 14:30	W	7	2	0	POOR	-	8	-
4 June 2004 17:30	W	7	3	0	MODERATE	-	7	-

APPENDIX E Tide Data

	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	19:00	19:30	20:00	20:30	21:00	21:30			
3-May-04	E2	E2	E2	E1	E1	E1	E+	W+	W1	W2	W2	W2	W2	W2	W1	W1	W1	W1	W1	E+	E1	E2	E2	E2	E2	E2	E2	E1	E1			
4-May-04	E2	E2	E2	E2	E2	E2	E1	E1	E1	W+	W1	W2	W2	W2	W3	W3	W3	W3	W3	W+	W+	W+	E+	E1	E2	E2	E2	E2	E2	E2		
5-May-04	E3	E3	E3	E3	E3	E3	E2	E2	E1	E+	-	-	W+	W+	W1	W1	W1	W1	W1	W1	W2	W2	W2	W2	E+	E2	E2	E2	E3	E3		
6-May-04	E1	E2	E3	E3	E3	E3	E3	E2	E1	E+	E+	W+	W+	W1	W2	W2	W2	W2	W2	W1	W1	W1	W1	W+	E+	E2	E2	E2	E3	E3		
7-May-04	-	E+	E1	E2	E3	E3	E3	E3	E3	E2	E1	E+	-	-	W+	W+	W+	W+	W+	W2	W2	W2	W2	X	X	X	X	X	X	X		
8-May-04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	W+	W+	W+	W+	W2	W2	W2	W2	W1	W1	W1	W1	W1	W1	W1	W1	
9-May-04	W1	W+	-	E+	E1	E1	E1	E2	E2	E2	E3	E3	E3	E3	E+	-	-	-	-	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+		
10-May-04	W1	W1	W+	W+	-	-	-	-	-	-	-	-	-	-	-	E+	E+	E+	E+	E1	E1	E1	E1	E1	E1	E1	E1	E1	E1	E1	E1	
11-May-04	W1	W1	W+	W+	-	-	-	-	-	-	-	-	-	-	-	E+	E+	E+	E+	E1	E1	E1	E1	E1	E1	E1	E1	E1	E1	E1	E1	
12-May-04	W2	W2	W2	W1	W1	W1	W1	W1	W1	W+	W+	W+	W+	W+	W+	E+	E+	E+	E+	E1	E1	E1	E1	E1	E1	E1	E1	E1	E1	E1	E1	
13-May-04	X	X	X	X	X	X	X	X	X	W	W	W	W	W	W	-	-	-	-	E+	E+	E+	E+	E+	E+	E+	E+	E+	E+	E+	E+	
14-May-04	X	X	X	X	X	X	X	W2	W2	W3	W3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15-May-04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16-May-04	X	X	X	X	X	X	X	X	X	W1	W2	W2	W2	W2	W1	W1	W1	W1	W1	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	
17-May-04	E3	E3	E3	E3	E3	E2	E1	E+	-	-	W+	W2	W2	W2	W1	W1	W1	W1	W+	-	E+	E1	E2	E2	E2	E2	E2	E2	E2	E2	E2	
18-May-04	E3	E3	E3	E3	E3	E3	E2	E1	E+	-	-	W+	W1	W1	W2	W2	W3	W3	W3	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	
19-May-04	E3	E3	E3	E3	E3	E3	E2	E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
20-May-04	E3	E3	E3	E3	E3	E3	E2	E1	E+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21-May-04	-	E+	E2	E3	E3	E3	E3	E3	E2	E1	E+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
22-May-04	E+	E1	E1	E2	E3	E3	E3	E3	E2	E1	E+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
23-May-04	W+	W+	-	E+	E1	E2	E2	E2	E2	E2	E2	E1	E+	E+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24-May-04	-	E+	E1	E1	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	
25-May-04	W1	W+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26-May-04	W1	W1	W1	W1	W1	W1	W1	W+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27-May-04	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1
28-May-04	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1	W1
29-May-04	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+
30-May-04	-	-	-	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+
31-May-04	E1	E1	E+	-	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+	W+
1-Jun-04	E2	E2	E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Jun-04	E3	E3	E3	E2	E1	E+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-Jun-04	E3	E3	E3	E3	E2	E2	E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Jun-04	E3	E3	E3	E3	E3	E3	E2	E2	E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

APPENDIX F

Interview and Questionnaire

Interview Transcripts- Mike Richardson

Kinuachdrachd, Jura.

Recorded: Sunday 6th June 2004.

Author (JE): *How long have you lived on Jura?*

Mike Richardson (MR): 38 years... when we arrived we lived ten years at Southend?, and the rest of the time up here.

JE: *And your professional relationship with the area?*

MR: It was fishing... and now, general involvement with the tourist trade, Bed and Breakfast, etc. Bunkhouse, hill guiding and now it is mainly guided walks, people staying who want a weeks exploration holiday, and in that case, in the course of week we explore the whole of Jura, hill-walking, usually 15-20 mile per day.

JE: *What is your experience of the Firth of Lorn and in particular the Gulf of Corryvreckan?*

Obviously from your fishing days, you have quite a lot of experience!

MR: Oh, yes. As a joke, I say, it is the Corryvreckan that caused my grey hair.

JE: *So a couple of questions on the wildlife. What is your opinion of any seabird activity within the Gulf?*

MR: My opinion (is) in some ways over the years, there has been a decline in numbers of all seabirds. And now, you tend to see the big (rumours) of birds are in the August, and September and October. Nesting birds, the two islands in the Corryvreckan (Eilean Beag and Eilean Mor) always used to be a mass of nesting birds. But now that has seriously declined either due to mink or otter predation on the fledglings or the eggs. But the puffin population used to be quite high... on Eilean Mor, I think it is now down to a dozen pairs... maximum.

JE: *So what birds do you get moving through in August?*

MR: Mainly gannets. Rafts of guillemots and razorbills, kittiwakes... A mixture of Black-backs, common gulls, everything is there because the Corryvreckan brings to the

surface masses of small fish and sandeels, so there is a bonanza of feeding. This also brings in the Arctic skuas, and Jura is the furthest south nesting site for Arctic skuas. And they, of course, join in this bonanza by harassing the feeding birds by making them regurgitate the food so they can then pick it up and take it to their nestlings. And also ... there is a lot of mackerel in the area, you see the gannets diving and of course this also brings in... following the shoals of mackerel who are following the sandeels... this'll bring in the porpoise and dolphins, and occasionally a bigger cetacean. But they are very, very rare now to see anything other than the porpoise and dolphins. And again, their numbers over the years have equally declined.

JE: *What sort of changes in numbers have you seen over the years? Firstly, in the numbers of seabirds?*

MR: Well, in seabirds... In the spring there is a big drop. I can't really give percentages because I haven't kept an accurate count. But I would have said it was fifty percent (down). And in the late summer and autumn, it would be twenty five percent down.

That's only a rough... It's a 'gue-stimate' that... rather... because there has been no scientific counting been done.

But an example would be that at the edges of the Corryvreckan, north of my house (Kinuachdrachd) there is a wee island in the bay. When we came to this house we had a hundred and forty nesting sites of Common and Arctic terns. Today there are no Arctic or Common terns on the island. This is either again, otter or mink. I point the finger at the mink, more than the otter.

JE: *And just quickly on the cetaceans, you said about the porpoise and the dolphin. Minke whale?*

MR: Minkes, yes. September time.

JE: *And Killer whales?*

MR: I haven't seen killer whales in this area for years.

JE: *But in the early days?*

MR: Oh, yes. Seven or eight of the pods. And I saw a Right whale about five years ago. Huge beast, must have been near about forty feet in length. And he followed us up the coast here... in the dinghy.

JE: *Followed all the way up?*

MR: Followed all the way up. Just beside us, and you could see his eye and all the great big... the barnacles all along his back.

JE: *And have you seen any change in the numbers of porpoise that you've seen?*

MR: Yes, I would say I've seen a steady decline, which possibly over the last four years has settled down. In the early days, you could see pods of a hundred or more animals, and gradually they went into a serious decline. But I think now its reached the bottom. Well... hopefully its reached the bottom.

JE: *So its eased off a bit?*

MR: Yes... Well, what the problem is, when it reaches a certain number you haven't got a baseline to calculate against. You can't say, "oh it was fifty", unless you're doing a scientific survey like what yourself [is doing]. We can only say "oh, we haven't seen a porpoise for awhile" or "I haven't seen a dolphin for a long while" or so on. And then you think, well, when we was fishing, you would see hundreds all round the boat. And... they could almost take the bait out of your hands.

(Interview ends)

Questionnaire by: Tony Hill of Seafari Adventures

Location: Easdale Island, By Oban, Argyll.

Recorded: Friday 13th August 2004.

1) *How long have you lived on Easdale?*

Four years 'temporarily'.

2) *What is your professional relationship with the area?*

Marine Eco Tour Operator.

3) *What is your experience of the Firth of Lorn and in particular the Gulf of Corryvreckan?*

Boats daily for five seasons and previously occasional visits over ten years.

4) *What is your opinion of seabird activity within the Gulf?*

Variable according to season but can be 'loads' [plentiful].

5) *What are your theories on porpoise in the Gulf of Corryvreckan?*

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If the tide is too strong, you won't see them- they are found near Jura on East tides and west tides are more difficult [to find], [often] look in the great Race. [To spot them] look at the edges of smooth/rough water patches [upwellings].

6) *What birds do you get moving through in August?*

? Never logged.

7) *What changes in seabird numbers have you seen over the years?*

Can't help, but feel numbers are less, personal opinion only.

8) *What changes in cetacean numbers have you seen over the years?*

More porpoise, whale and dolphin but perhaps we are getting better at spotting them.

9) *Have you seen any change in the numbers of porpoise that you have seen?*

As for Question 8.

10) *Do you have any other theories or ideas about cetacean or seabird activity in the Firth of Lorn?*

We have not spotted Minke or Porpoise outside Gulf / West Grey Dogs this season.