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FV Lady Nicola

Survey 0819H

REPORT

12 -13 Sep 2019

Loading: Loch Aline Marina. 12 September 2019

Boarding: Loch Aline Marina. 12 & 13 September 2019 (disembark overnight at port each day)

Unloading: Loch Aline Marina. 13 September 2019

In setting the survey programme and specific objectives, etc the Scientist-in-Charge needs to be aware of the restrictions on working hours and the need to build in adequate rest days and rest breaks as set out in Marine Scotland's Working Time Policy (Lab Notice 34/03). In addition, the Scientist-in-Charge must formally review the risk assessments for the survey with staff on-board before work is commenced.

In the interest of efficient data management it is now mandatory to return the survey report, to I Gibb and the Survey Summary Report (old ROSCOP form) to M Geldart, within four weeks of a survey ending. In the case of the Survey Summary Report a nil return is required, if appropriate.

Personnel

J. Thorburn (St. Andrews Uni) SIC

Project: 2 days (return to port each day)

Gear

1 x VR100 + hydrophone
2 x 60 kg ballast blocks
2 x Acoustic release rope cannisters
6 x 11 inch hard floats
Tools
Spares for 8 rope cannisters (bolts and shackles)

Background and Objectives

Cruise 0618H deployed 10 acoustic receiver units within the Loch Sunart to the Sound of Jura Marine Protected Area July 2018. These units communicate with and record the presence of transmitter tags attached to Common skate (*Dipturus batis*), the MPAs designation feature. The tags transmit a unique ID, allowing the identification of individual tagged skate, the receivers record the presence of the tag in the form of a date and time stamp along with the unique ID number. The main aim of this project is to see how long individual skate remain within the Loch Sunart to the Sound of Jura Marine Protected Area over a long period of time as this site is designated for the conservation of the Common Skate. The receivers are retrieved via acoustic

release from a VR100 unit from a vessel and all equipment is recovered via rope held in a rope cannister with deployed moorings. When retrieved, the rope cannister and receiver should be inspected for signs of wear, worn parts should be replaced and the unit should be rearmed and redeployed at its original deployment location. Servicing was undertaken in January/February 2019 when two of the units were removed for repair, but the remaining 8 require their second round of servicing.

Specific survey objective is as follows:

1. Recover 8 Acoustic receivers (Vemco VR2AR) within the Loch Sunart to the Sound of Jura Marine Protected Area
2. Download Data
3. Redeploy at original deployment sites (Fig 1, table 1)

Narrative

Personnel and equipment loaded and unloaded at Loch Aline daily during survey.

The procedure used was to steam to the station and establish communication with receiver. Receiver would come to surface and be retrieved. Data was then download and received and rope canister were inspected. If equipment was found fit to redeploy, servicing and re-arming were undertaken, and the receiver was re-deployed at its original site. Station locations are shown in Figure 1 and sites are listed in Table 1.

On 12 September, station 1, station 6, station 7 and station 8, were visited. In both cases, the rope cannister had parts that needed replacing so all equipment was kept on board for shore-based service.

On 13 September, station 2, station 3, and station 4, station 5 were retrieved, inspected and successfully redeployed.

Acoustic tag deployment.

All remaining 8 Vemco VR2AR acoustic receivers were recovered and redeployed within the Loch Sunart to the Sound of Jura MPA (Fig 1, table 1) during 0819H.

Submitted: James Thorburn 11 October 2019

Approved: P Boulcott 03 February 2020

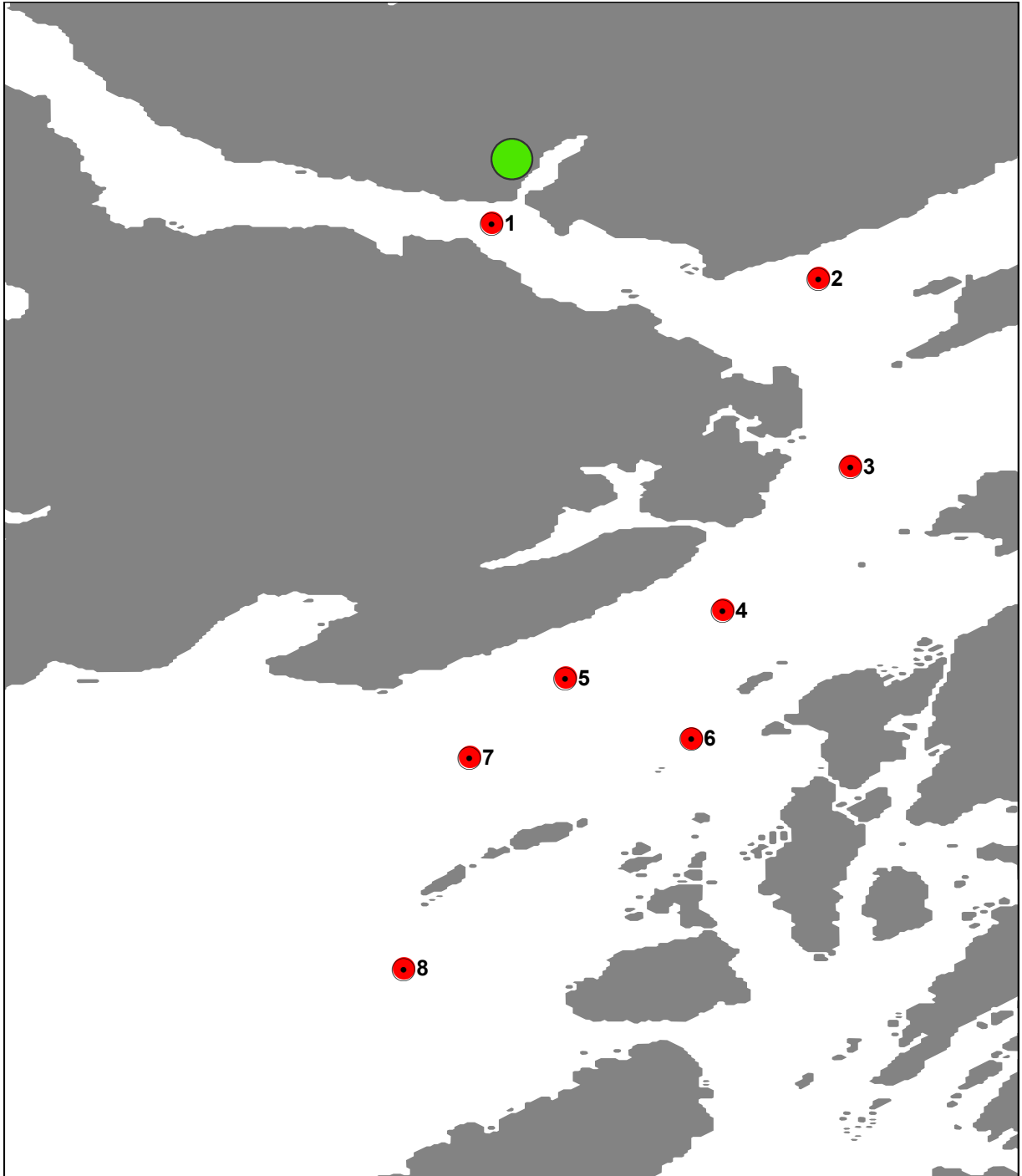


Figure 1: Location of tagging sites during 0819H.

Table 1: Locations of serviced receiver units during 0819H

Station number	receiver ID	Lat	Dec Lat	Long	Dec Long
1	546135	56° 31.32N	56.522	5° 47.22W	-5.787
2	546134	56° 29.82N	56.497	5° 38.4W	-5.64
3	546133	56° 24.683N	56.41138	5° 37.536W	-5.6256
4	546132	56° 20.76N	56.346	5° 40.98W	-5.683
5	546131	56° 18.91N	56.31517	5° 45.238W	-5.75397
6	546209	56° 17.263N	56.28772	5° 41.834W	-5.69723
7	546136	56° 16.74N	56.279	5° 47.82W	-5.797
8	546380	56° 10.98N	56.183	5° 49.595W	-5.82658