

R1/3

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**CHARTER VESSEL AORA**

**REPORT**

3-7 August 1989

**Personnel**

A Baird	SO
A Matthews (Mrs)	ASO
E MacDonald (Miss)	Student

**Objectives**

1. To investigate the metabolic rates of phytoplankton size classes, zooplankton and micronekton at predetermined sites in Loch Linnhe and the Firth of Lorne.
2. To obtain hydrographic data at sampling sites.
3. To obtain nutrient, CHN and photosynthetic pigment samples at sampling sites.

**Narrative**

Scientific staff travelled to Millport on 2 August. D Baird and A Matthews joined *Aora* on 3 August and set up equipment during passage to Dunstaffnage. E MacDonald drove the official car to Dunstaffnage, to enable the unloading of the vessel in Dunstaffnage/Oban at end of trip. The vessel operated an 11 hr working day except when making passage to and from Dunstaffnage and on 5 August when the vessel worked 15 hours. The vessel was unloaded and scientific staff disembarked by 0900 hr on 7 August in Oban.

Between 4-6 August one site was visited each day. At each a hydrographic study was made and samples taken for nutrient, CHN and pigment analysis; primary production measurements using the <sup>14</sup>C uptake method (size fractionated after incubation) were also carried out and ammonia excretion rates were measured on replicate samples of at least 2 species of copepod. Copepod egg production was measured by 24 hour incubations at the sites visited on 4th and 5th (sites 1 and 2).

All sites visited had been sampled during the *Calanus* charter in June. Results will be used in conjunction with those obtained on *Clupea* during 1-11 August, and *Calanus* during 5-18 June.

D Baird  
31 August 1989

Sites visited during "AORA" cruise August 1989

