Ware, Fiona (2014) The surprising biodiversity of Scotland’s lochs and of saline lagoons in the Outer Hebrides, SCRR Newsletter, NO.79; SPR 2014 p. 3.

http://repository.nms.ac.uk/1210

Deposited on: 11 June 2014
IN SEPTEMBER 2012, a team including marine biologists from National Museums Scotland was commissioned by Scottish Natural Heritage to survey the biodiversity of saline lagoons in the Uists. This survey revealed unusual and highly specialised species of plants and animals including the rare foxtail stonewort Lamprothamnium papulosum and the lagoon cockle Cerastoderma glaucum.

Saline lagoons are bodies of brackish water that have a restricted connection to the sea. The intrinsically variable salinity within lagoons, which may fluctuate with tidal cycles or in response to seasons and rainfall, influences the structure of lagoon communities. Lagoon specialists, tolerant of environmental fluctuations, thrive in conditions that would cause intolerable stress in their saline or freshwater counterparts.

Internationally important examples of this habitat type, given Priority Status on Annex 1 of the EC Habitats Directive, occur in Scotland. Taxonomic confusion within a number of phyla has led to doubts in some existing species records and without access to historic specimens the records cannot be verified. By incorporating recent NMS research on the morphological and molecular identification of mud snails (Hydrobiidae) and the morphological identification of lagoon isopods this survey has clarified the distribution of lagoon specialists in the Uists and will inform a monitoring strategy.

National Museums Scotland’s collection of marine invertebrates is one of the largest collections of its kind in the UK and is estimated to contain nearly one million specimens. Botanical and zoological specimens from the survey have been incorporated into the collections of the Royal Botanic Garden Edinburgh and NMS; NMS guarantees to care for the material in perpetuity and to make it accessible to researchers through our loans scheme.

... and of saline lagoons in the Outer Hebrides

Fiona Ware, Curator of Invertebrate Biology at NMS, reports on a survey of species in a specialised habitat.