## Integrating data and fisheries management in small-scale fisheries in the Shetland Islands.

## Beth Mouat<sup>1</sup> & Amos Barkai<sup>2</sup>

## <sup>1</sup> NAFC Marine Centre, Shetland, UK <sup>2</sup> OLRAC SPS, Cape Town, South Africa

The shellfish fisheries of the Shetland Islands are managed at a local level via a Regulating Order granted to the Shetland Shellfish Management Organisation (SSMO) in 1999. All shellfish fishermen active within the 6nm limit around Shetland must hold an SSMO licence, a condition of which is that they fill in a logsheet detailing fishing activity relative to a 5x5nm grid. The ongoing collection of fisheries data from logsheets, alongside biological data collected at the NAFC Marine Centre, has permitted stock assessments to be carried out, which feed into the management process. Analytical stock assessments can, however, be time consuming to produce, may be carried out on data that is several years old, and may only be available on an annual basis. The outputs from analytical models can be difficult for fisheries managers to interpret and may have significant risks associated with their application to management decision making. In order to more effectively facilitate the integration of data and fisheries management the NAFC worked with Olrac SPS to develop an Olrac Dynamic Data Manager (DDM) specific to this fishery. The Olrac DDM for Shetland incorporates fisheries, biological and environmental data with a map based interface to allow fisheries manager's real time access to spatial data, which can be linked to reference points within harvest control rules. Any geographically referenced data layers can be viewed on the map interface allowing integration of fisheries data with information from the Shetland Marine Spatial Plan, permitting quantifiable consideration of fisheries in the planning process.

Key words: inshore fisheries, data led fisheries management, spatial data, Olrac Dynamic Data Manager, marine spatial planning

Contact Author: Dr Beth Mouat, NAFC Marine Centre, Port Arthur, Scalloway, Shetland. UK ZE1 0UN beth.mouat@uhi.ac.uk +44 (0)1595 772310