

The Value of the Open Access Repository to the Marine Institute

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Introduction

In March 2011, the Marine Institute launched its Open Access Repository <http://oar.marine.ie/> (**Figure 1**). The Open Access Repository is the online collection of the publications of the Marine Institute. The Repository contains digital full-text versions of Marine Institute publications including reports, peer-reviewed articles, conference papers, information leaflets, educational resources, and MSc / PhD theses, which are divided into a number of different collections including: Status of Fish and Shellfish; Funded Research Publications; Survey Reports; Scientific Papers; Annual Reports; Marine Environment and Health Series; and Marine Resource Series. The staff of the *Oceanus* Library in the Marine Institute headquarters in Oranmore manage the Repository. The Repository uses DSpace software and is hosted externally due to technical considerations. The purpose of this article is to discuss the development of the Repository during its first 12 months.

Challenges and Solutions

Several challenges were faced by the Library team in order to populate the Repository with publications. The first challenge involved sourcing PDFs of all publications published by the Marine Institute since its inception 20 years ago, as well as older series such as Irish Fisheries Bulletin which predates the Institute. Much work had been completed over the previous number of years to scan and produce PDFs using OCR (Optical Character Recognition) of back issues of non-electronic publications, some which dated back to the 1930s. A bursar student spent eight weeks in 2011 digitising the remaining back issues of series such as Irish Fisheries Leaflets, Irish Fisheries Bulletin, and Irish Fisheries Investigations Series A and B. These PDFs and their related metadata were then uploaded to the Repository during the first four months that the Repository was operational (**Figure 2**). This created a critical mass of content which would showcase the potential and functionality of the Repository and proved of great assistance to overcoming the second major challenge.

The second challenge involved obtaining buy-in from management and researchers in the Marine Institute so that they actively engaged with the Repository and submitted their current publications to the Library for inclusion in the Repository. From April to June 2011, presentations were made to management and also to each research section of the Marine Institute to explain to them the purpose of the Repository and the benefits it would deliver for them. The biggest concern that many researchers had was that they would breach copyright regulations if they deposited their peer-reviewed journal articles in the Repository. It was explained during the presentations, and during informal discussions with individual researchers later, that most publishers allowed some version of an article to be uploaded to an institutional repository and that the Library team would ensure that any publication included in the Repository would not infringe on publisher's copyright.

Continuing Promotion

After the initial phase of presentations and meetings with researchers, it was important that the Library team constantly pushed and promoted the Repository to staff whenever an opportunity arose. Several strategies were put in place to encourage increased use of the Repository. It was made a requirement that staff submit a PDF copy of all Marine Institute reports to the Library for inclusion in the Repository. Previously, reports were sent to the Library team and uploaded to the publications page on the Marine Institute website (<http://www.marine.ie/>). By the end of August 2011, all of the publications on the old publications page were added to the Repository and this page of the Marine Institute website was removed and replaced with a link to the Open Access Repository.

An email alert was set up in Google Scholar to notify the Library team of any new journal articles, conference papers or book chapters by Marine Institute staff. The Library would then email the Marine Institute staff member(s) and ask them to send an author created final version, in accordance with copyright permissions, of the article for inclusion in the Repository. This proactive approach has been successful in obtaining items to deposit and often, once an author has been contacted in this way initially, they will send subsequent journal articles to the Library without further prompting.

In addition, monthly reports detailing performance indicators such as the number of visits to the Repository and the most downloaded items are prepared and sent to the management team. This has generated interest and positive feedback from the directors as they can see the impact of the Repository in terms of measurable statistics.

In December 2011, a further promotional campaign was initiated with information leaflets distributed throughout the Marine Institute, posters placed on the notice boards and a news item placed on the staff intranet. This campaign further increased the awareness of the Repository amongst staff and has resulted in some additional articles and publications being submitted to the Repository. The campaign concluded in January 2012 with a news item on the Marine Institute website highlighting the Repository (<http://www.marine.ie/home/aboutus/newsroom/news/MarineInstitutePublicationsnowavailableOnline.htm>).

Benefits

The aim of the Repository is to collect, preserve and provide open access to the research outputs and other publications of the Marine Institute, including the research publications supported by National and European funded marine research programmes. The main benefits of the Repository are as follows:

- The Repository increases the visibility of the Marine Institute's research as the records in the Repository are fully searchable by Google, Google Scholar and other search engines. The Repository is set up to share its records with subject specific search services that systematically collect the contents of the Repository such as Avano

(<http://www.ifremer.fr/avano/>). This means that the research of the Marine Institute becomes part of the greater marine research community.

- The Repository acts as a publishing platform for Marine Institute publications, especially as budgets inhibit expenditure on printing, many of the series become electronic only, such as Marine Environment and Health Series and Irish Fisheries Bulletin.
- The Repository provides a searchable database of Marine Institute publications from one central portal. Previously it was difficult to search for publications on the Marine Institute website as publications were located in different pages.
- The Repository acts as a digital archive of the research output of the Marine Institute. Each publication record in the Repository is permanently preserved and permanently accessible as each record is assigned a permanent web address (persistent identifier) that ensures the item is preserved digitally. The Repository preserves old reports and papers, such as the Irish Fisheries Leaflets series which dates from 1938, that may only exist in very small numbers in printed format.
- The Repository increases brand awareness of Marine Institute research.
- Inclusion of Marine Institute publications and articles in the Repository increases the probability of these publications being cited as research has shown that open access journal articles are cited more frequently than those that are not freely available online (Davis, 2009; Gargouri et al., 2010; Norris, Oppenheim, & Rowland, 2008).
- The Repository facilitates compliance with national and international funding bodies' requirements, who mandate that all publications arising from their funding be placed in an open access repository.
- The Repository offers performance statistics for each publication that provides information on where the research of the Marine Institute is being used (**Figure 3**). These statistics show where in the world people are viewing each publication, and how often it is being viewed and downloaded.

Conclusions

The establishment of the Open Access Repository has been a very important development for the Marine Institute. The Repository currently holds over 675 publications and has had almost 10,000 visits from more than 49 countries since its launch 12 months ago. The number of publications available and the number of visits to the Repository have steadily increased over the 12 months of operation and the Library team are confident that the number of visitors will continue to increase as the collection develops (**Figure 2**).

The next steps in the development of the Repository are to continue to promote the Repository both internally and externally and to add new collections. It is important to regularly engage with management and researchers to ensure that the Repository becomes firmly embedded within the structures and policies of the Marine Institute. It is also planned to promote the Repository externally through writing articles in trade magazines and other publications such as the Public Sector Times. The new collections that are proposed to be added to the Repository in the coming year include lesson plans and worksheets developed for the Explorers primary school education programme and the addition of ICES Conference and Meetings Documents authored/co-authored by

Marine Institute staff. It is also proposed that a deposit mandate be included in the overall policy of the Marine Institute so that all staff must submit all new publications, including an author-produced copy of peer-reviewed articles, to the Library for inclusion in the Repository. Another future development is to train and grant permissions to allow researchers to self-archive publications to the Repository rather than having Library staff input all the metadata. Publications deposited by staff would not become “live” online until Library staff have checked the metadata and copyright permissions of each item.

Although the Open Access Repository has been a success so far for the Marine Institute and is beginning to show signs of becoming embedded within the culture of the Institute, it is important to continue to promote and develop this valuable resource.

References

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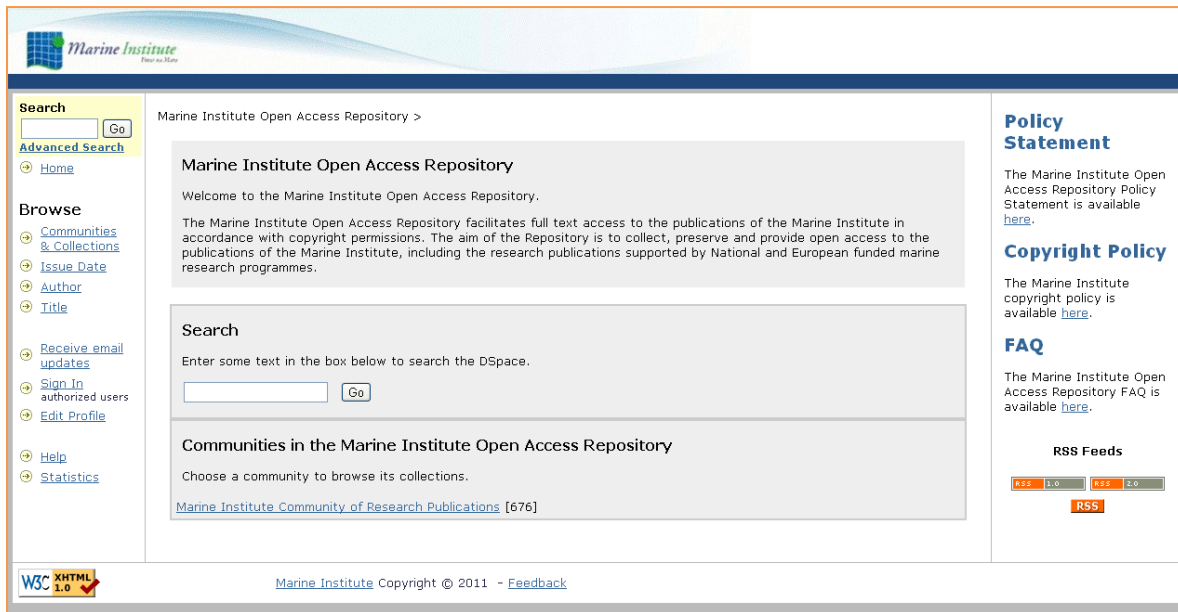


Figure 1: Screenshot of the Marine Institute Open Access Repository <http://oar.marine.ie/>.

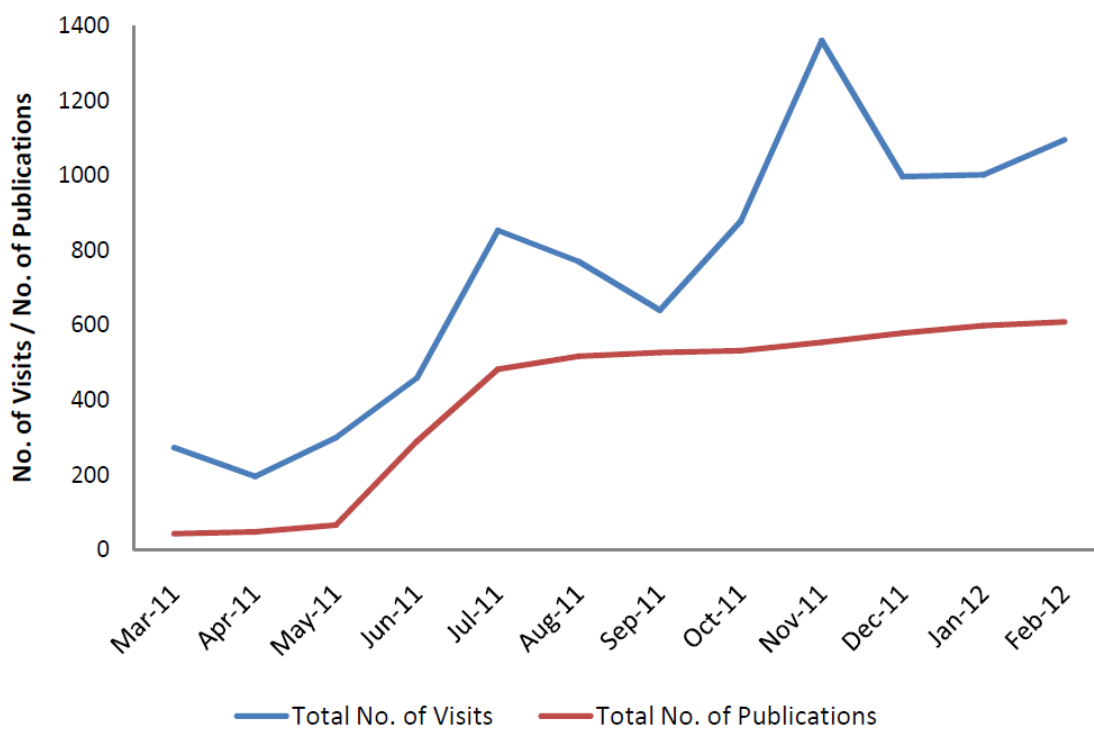


Figure 2: Total number of publications in the Open Access Repository and the total number of visits to the Repository per month from March 2011 to February 2012.



Figure 3: Graph from Google Analytics report for week 7-13 November 2011 showing that there were 517 visits to the Marine Institute Open Access Repository from 38 different countries or territories (The darker the green the higher the number of visits from that country).