## MarBEF publishing revisited

## By Ward Appeltans, Jan Haspeslagh and Edward Vanden Berghe

Networking and integration served within a partnership approach and covered with a delicious sauce of free and open access to data and information is MarBEF's main dish, and it is this recipe that has helped MarBEF to successfully bring marine biodiversity research to a European level. Numerous meetings, workshops, training courses and Responsive Mode Projects (RMPs) have brought together many scientists. This integration has created endless new possibilities for new initiatives – the MarBEF Publication Series and the MarBEF Open Archive, to mention just two. So, is this having any effect on the way we publish as a network today?

The general assembly in Lecce (May 2006) unanimously voted to agree to the creation of a MarBEF Open Archive (MOA) (see http://www.marbef.org/moa or Appeltans *et al* (2005) for an introduction to open archives). MOA contains the digital version of published works that are held within the MarBEF Publication Series (MPS) (i.e. any class of publication where at least one author is a network member and in which MarBEF is acknowledged). In addition, those papers where MarBEF has b(r?)ought unrestricted 'Open Access' are automatically part of this archive.

MOA acts as a central archive for any MarBEF publication, so not only high-ranked scientific articles but also grey documents which are often hard to trace, are captured and made available online. At the moment, MOA holds 174 publications, the majority of which are contributions from the MarBEF newsletter or publications in books of abstracts and reports. Besides these publications that fall outside any copyright restricted format, MOA contains 55 articles that are published in peer-reviewed academic journals and are now free to download. MOA can only archive those publications whose publishers agree on the concept and principles of open digital archives (hereafter called green publishers/journals). As a consequence, 22 papers that were published in non-green or white journals could not be made available through MOA.

According to the SHERPA/RoMEO online database, which provides a listing of publishers' copyright conditions, 94% of all publishers allow for self-archiving on the Web. When we look at the MarBEF publication series it seems that, at least in the field of Marine Biodiversity and Ecology, white publishers (who do not





Fucus vesiculosus at low tide.

Table 1. Number of MarBEF papers published in 'green' or 'white' journals.

	2004	2005	2006
Green papers	3	11	41
White papers	2	15	5 ()
Total papers	5	26	6 7
Green journals	3	7	17
White journals	2	9	4
Total journals	5	16	21

allow self-archiving) still control an important part of the higher impact journals. Since the start of MarBEF, we have published in 35 different journals, of which only 69% were green with a median impact factor of 1.358, whereas the median impact factor was 2.718 for the white journals (based on Journal Impact Factors of 2004).

Notwithstanding this difference, there is a clear shift in our choice towards green journals. In 2005, only 42% of the papers, or 43% of the journals in which we published, could be archived in MOA, whereas in 2006 (the year we started MOA), 89% of the papers or 81% of the journals we published in, are green (Table 1). When taking the impact factor into account, more green papers may result in a decrease in average impact. Even if journal impact factors can be a measure of performance at all, it would at least be fair to calculate the total score of impact factors gathered in an equal time-scale. The total score in impact factors increased from 38.532 in 2004 to 114.858 in 2005 and reached 100.282 in September 2006. This means that, although already more papers are published in 2006, there is not an increase in terms of the cumulative impact factor. This could be explained by our choice for green journals. According to Laurence (2001), articles that are freely available online are cited more than articles that are not freely available. It would be interesting to see if MOA could deliver an increased citation impact.

Despite the open access movement, the journal *Marine Ecology Progress Series* (MEPS), also called the 'Citation King,' is still very popular and counts for 13 articles, which is 17% of all our MarBEF papers. Only recently, MEPS has allowed for authors and research groups to buy open access for their papers. The result is that four out of six MarBEF papers published in MEPS of this year are freely available in MOA.

It is important to note that, today, the copyright of a paper almost always remains with the publisher and that a publisher can withdraw from any collaborative projects within the Open Archive Initiative framework. Nowadays, many publishers agree to change this copyright, so in order to secure open access to your paper, we suggest it is better to ask for inclusion of the following clause in the copyright form of your paper: 'I hereby transfer to [publisher or journal] all rights to sell or lease the text (on paper and online) of my paper [title]. I retain only the right to distribute it free for scholarly/scientific purposes, in particular the right to self-archive it publicly online on the Web.'

Also worth mentioning is that it is not only MOA that gives a better visibility to our MarBEF papers. The European Ocean Biogeographic Information System (EurOBIS) systematically screens and captures all the species distribution data and provides them through an online interactive atlas. At the moment, over 1,700 distribution records are listed that way.

The number of MarBEF papers is increasing each year, from five in 2004, to 26 in 2005 and already 46 in September 2006 (including 10 in press) (Table 1). It would be interesting to check if the number of authors and MarBEF partner institutes involved in a paper also

Table 3. Number of MarBEF papers in relation to number of MarBEF institutes involved.

Institutes	1	2	3	4	5
2004	3	0	1	1	0
2005	20	3	2	1	0
2006	22	11	2	0	1
Total papers	45	14	5	2	1

Table 2. Number of MarBEF papers in relation to number of authors.

Authors	1	2	3	4	5	6	7	8	10	12	15	21
2004	1	0	1	0	1	0	0	0	0	1	1	0
2005	5	8	3	3	2	4	0	1	0	0	0	0
2006	4	6	8	4	6	4	1	0	2	0	0	1
Total papers	10	14	12	7	9	8	1	1	2	1	1	1

reflects the collaboration within the network. The numbers in Tables 2 and 3 show that the majority (54%) of all papers have only one to three authors, and in 67% of all cases only one MarBEF institute is involved, and in only 36% of these papers was there a collaboration outside MarBEF (data not included in table). Overall, this means that the majority of MarBEF papers are still written within a single institute and within a small group of co-authors. On the other hand, the number of MarBEF papers in which more than one (even up to five) MarBEF institutes are collaborating is increasing - from six in 2005 to 14 in 2006. The sample we used in this study is very small; we only counted publications in peer-reviewed scientific journals, but the more than 100 articles published in MarBEF newsletters and reports are also important and should not be forgotten. We also didn't compare the present situation with times before MarBEF, so drawing main conclusions or marking clear trends at this stage might be premature. What we learned is that now, after 2.5 years of MarBEF

and one year of responsive mode research projects, the network is increasing in size and more papers are being produced, both with a partnership approach, and in a wiser way (i.e. more freely accessible).

## References

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**SHERPA/RoMEO database** – online at http://www.sherpa.ac.uk/romeo.php.

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Sampling for sediment samples on a site inspection. (© Crown copyright 2006. Reproduced by permission of Cefas, Lowestoft.)

