The Biological Bulletin [1]

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From 1886 to 1889 Charles Otis Whitman [4] was director of the Allis Lake Laboratory [5] in Milwaukee, Wisconsin. The lab was established by Edward Phelps Allis [6], Jr. to provide a place for biological research separate from a university setting and a place where an independent scholar like Allis himself could work. Allis had hired Whitman as an instructor to establish the lab, direct it, and lead a research program there. The lab lasted for eight years, attracted several researchers, and the papers that came out of the lab included a focus on embryology [7]. This raised the question of where to publish the work since there were few life science journals being published in the United States , which led Whitman to propose a new journal.

With Allis's support, Whitman started the *Journal of Morphology* ^[8] in 1887 for long, almost monographic articles complete with elaborate illustrations. In addition, Whitman and his student William Morton Wheeler ^[9] (who had also worked at the Allis Lake Laboratory ^[5]) started a second journal for shorter articles and reports that could quickly appear in print. This was seen as a companion for the *Journal of Morphology* ^[8] and was intended to embrace the entire field of animal biology. At first they called it the *Zöological Bulletin* ^[70], but after the first two years of publication in 1898 and 1899, the title changed to *The Biological Bulletin* ^[7]. This also fit with the fact that the journal started out independently and then in 1890 became affiliated informally with the Marine Biological Laboratory ^[11] (MBL) in Woods Hole ^[12], Massachusetts, of which Whitman served as first director starting in 1888. The MBL also published its series of evening lectures ^[13] throughout the 1890s, as *The Biological Lectures Delivered at the Marine Biological Laboratory* ^[11] in Woods Holl. Whitman encouraged MBL investigators to publish in the first two journals and the lecturers to contribute their lectures to the third. Very quickly, Whitman had helped the United States establish itself as a place where serious scientific research was done in the life sciences.

Most new scientific journals start with an introduction, a statement of mission, or something that tells the reader and potential subscriber or submission author what this publication is about. Not *The Biological Bulletin* [3]. It began its first issue as *The Zöological Bulletin* [10] in 1897 (*The Biological Bulletin* [3] in 1899) with an article by Allis himself. Other investigators from Allis Lake Lab and from the MBL submitted their work, including women scientists who were generally rare among life science researchers.

By 1899 Whitman had moved to Clark University [14] and had realized that the journal needed a broader base. The first issue from the MBL and under the new *Biological Bulletin* [3] name opened with Maynard M. Metcalf on "Some Relations between Nervous Tissue and Glandular Tissue in the Tunicata." The issue includes articles by T. H. Morgan, Anne Moore, Garry de N. Hough, and C. W. Hargitt. The front matter says only the title of the journal and that it was edited by the Director and Members of the Staff of the Marine Biological Laboratory [11], Woods Holl, Massachusetts.

This continued for two years, but in 1900 Whitman and the Ginn Company in Boston that was publishing the journal had disagreements, and finding funding for the journal was a challenge. As a result, the 1900 volume had only three spring issues and 1901 came out only midway through the year. Issues resumed full force in 1902 with the New Era Publishing Company in Lancaster, Pennsylvania (which later became Lancaster Press). This was the real solid start of the journal, with the excellent administrator and Assistant Director of the Marine Biological Laboratory [11] Frank R. Lillie serving as Managing Editor and an appointed editorial board comprised of Whitman, Edwin Grant Conklin [15], Jacques Loeb [16], Thomas Hunt Morgan [17], William Morton Wheeler [9], and Edmund Beecher Wilson [18]. Lillie remained as managing editor for nearly a quarter of a century and placed the journal, as he did the MBL itself, on a solid intellectual and economic foundation.

In starting again in a more formal way, the MBL staff recognized the need to explain what *The Biological Bulletin* [3] was meant to be. It was meant to offer an American version of the German *Biologisches Centralblatt* or *Anatomischer Anzeiger*, they said. And it was up to American scientists to join the editors and make the enterprise successful.

The journal has remained strong through many different editors and changes in MBL administration, in large part because of a clear and coherent mission that is broad enough and yet focused enough to have remained compelling for more than a century. It has been a challenge at times, when specialty publications have become the norm, to define a valuable niche for a publication that includes all of biology in its mission. The articles have been largely reports of experimental work, often but not always with marine organisms, often concentrating on the areas in which the MBL itself excels, such as neurobiology, development, cell biology, and physiology.

The journal has helped build the MBL library into one of the world's best biological research centers, since from the beginning, the editors swapped with many other publications and thereby helped all the collections grow. Today, MBL Corporation members can choose to receive a copy of the journal with their membership, and as of 2008, all past issues are now <u>available through open access online</u> [19].

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