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# The Young Darwinian and bioluminescence

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## Abstract

Charles Darwin described many examples of bioluminescence in his Beagle diary. The first two entries in 1832 are the spectacular emission of dinoflagellates in the sea off Tenerife. But, Darwin had a problem with bioluminescence, highlighted in Chapter 6 of ‘On the Origin of Species – Difficulties on Theory’. The Young Darwinian is a new international journal, providing an inspiration for school students to carry out projects and to publish their own work, ideas and experiences, using Darwin’s curiosity about bioluminescence as a centre piece ([www.theyoungdarwinian.com](http://www.theyoungdarwinian.com)). The web site contains videos of a famous luminous jellyfish, and a genetically engineered leaf that flashes when you touch it. Bioluminescence is also found in Dr Darwin’s Curiosity Shop. There is also humour in Dr Niwrad’s Laughter lab. The journal includes all aspects of science, natural history, technology, engineering, maths, and entrepreneurship. The first issue, published in January 2018, contains articles on why a flash from a brittle star is better than a glow, and how bioluminescence has inspired several ‘curious people’, including a Nobel Laureate, as well as creating three individual billion dollar markets. One of the school student projects focused on why some anemones and corals are coloured, with fluorescent proteins related to GFP. The journal has an editorial and advisory board with representatives from 16 countries, including several experts in bioluminescence, to provide positive peer review for students, and mentoring. Student experiences include natural history and engineering observations, field trips, and visits to museums, science centres and companies. We aim to link up students across the world to communicate their experiences on bioluminescence. We hope that the International Society for Bioluminescence and Chemiluminescence will be vehicle to take this exciting project forward across the world. Come and join us. Tell us what makes your students curious. Curiosity inspires, discovery reveals.

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