

Wallace pioneered astrobiology too

The field of astrobiology, called ‘exobiology’ during the space programmes of the 1960s (*Nature* **488**, 160; 2012), was anticipated six decades earlier by Alfred Russel Wallace, better known as the co-discoverer of the principle of natural selection.

Next year is the centenary of Wallace’s death, when his seminal contribution to biogeography and evolution will be celebrated. But he should also be remembered as a pioneer in astrobiology, whose hypotheses are still alive today.

Wallace introduced the concept of “astro-biology” in his popular book *Man’s Place in the Universe* (Chapman & Hall, 1903). He reviewed the physical conditions required for organic life in terrestrial ecosystems and concluded that Earth is the only habitable planet in the Solar System.



He later published a monograph (*Is Mars Habitable?* Macmillan, 1907) evaluating astronomer Percival Lowell’s suggestion that Mars could be “inhabited by a race of highly intelligent beings” (see *Nature* **74**, 587–589; 1906). After analysing what was then known about the Martian climate, temperature, possible presence of water and the ‘canals’ thought by Lowell to indicate intelligent life, Wallace roundly refuted this idea.

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