



frontiers of biogeography

the scientific magazine of the International Biogeography Society



Peer Reviewed

Title:

A remarkable anniversary: Surtsey becomes 50 years

Journal Issue:

[Frontiers of Biogeography, 5\(1\)](#)

Author:

[Adersen, Henning](#), University of Copenhagen

Publication Date:

2013

Publication Info:

Frontiers of Biogeography, UC Merced

Permalink:

<http://www.escholarship.org/uc/item/05d05749>

Keywords:

island biogeography, volcanic islands

Local Identifier:

fb_16083



eScholarship
University of California

eScholarship provides open access, scholarly publishing services to the University of California and delivers a dynamic research platform to scholars worldwide.

A remarkable anniversary: Surtsey becomes 50 years old

Every year there is a lot of round anniversaries to celebrate, and 2013 is no exception. Opera fans celebrate Wagner and Verdi, and we biogeographers highlight Wallace and the MacArthur–Wilson plot.

There is a round anniversary of another kind in 2013. It is 50 years since Surtsey emerged from the sea, in the Vestmanna Archipelago south of Iceland. I still remember the excitement in the press and the extraordinary pictures on black-and-white television. But after a certain time the interest seemed to dwindle a bit, and in the international press (journalistic as well as scientific) reports from Surtsey became rather rare.

This is strange for at least two reasons. One is that Surtsey was born right in the middle of the debate on two of the most important paradigms in the twentieth century: that of plate tectonics and that on island biogeography. And for both fields the processes on Surtsey yield unique evidence for the theories. The other reason is that Surtsey was not left alone. Our Icelandic colleagues within geology, geomorphology, oceanography and biology have carefully and meticulously followed the island, and, through repeated and systematic surveys, they have built up a wealth of data on the infancy of an island. They have carefully reported their observations (for example there is a long series of ‘Surtsey Reports’ and a home page where almost everything can be found). But Surtsey does not appear so often in textbooks or reviews as, for example, Galápagos, Krakatau or Hawai’i.

Some of the findings are quite extraordinary. To mention a few: it has been shown that the geochemical transition of volcanic ash to tufa

is a question of decades and not of centuries—and erosion of basaltic rocks occurs within the same time scale (Surtsey has lost half of its area already). Furthermore, the build-up of a plant cover has proved to be rapid: so far roughly 100 species of higher plants have been reported and many of them have disappeared again. This is far more than in the rest of the Vestmanna Archipelago and around 20% of the entire flora of Iceland. The colonization of birds has also been documented and the influence of seabird colonies on vegetation succession has been recorded from scratch.

Our Icelandic colleagues have decided to seize the 50th anniversary as an opportunity both to synthesize the existing knowledge and to communicate it to the international scientific community. They will host an international conference in Reykjavik in August 2013 (12th–15th), focusing on the geological and biological processes on Surtsey. The first and second circulars have been distributed, and more information and details can be found on <http://www.surtsey.is>.

The organizers have tried to urge Surt (the equivalent in Nordic mythology to Vulcan/Hephaistos) to let Surtsey have a younger brother be born just south of El Hierro in the Canary Islands. He is on the way; let us see whether he makes it in 2013.

Henning Adersen

Centre of Macroecology, Evolution, and Climate,
Department of Biology, University of Copenhagen, Denmark. adser@bio.ku.dk

To post jobs, advertisements, or other announcements please contact the Frontiers of Biogeography editorial office (frontiersofbiogeography@googlemail.com). Advertisements are \$50 per quarter page for professional or institutional positions. Announcements are free to members for vacancies in their lab. All advertisements and announcements also appear at no additional cost on the IBS facebook page (in abbreviated form) and on the IBS Blog (in long, or longer form).