



GUEST
REPORT

A 21st century Pangea? The emergence of a new international forum for Biogeographers

On the 4th January, 2003, a four-day conference opened in a gambling resort in Mesquite, Nevada, USA. It was the inaugural meeting of a new society, The International Biogeography Society. The theme of the meeting was ambitiously titled *Frontiers of Biogeography*, and some 200 biogeographers gathered to participate in it (Fig. 1).

Biogeography has a long and distinguished pedigree within the natural sciences. We may claim as our founding authorities the likes of Johan Reinhold Forster (1729–1798), Alexander von Humboldt (1769–1859), Charles Darwin (1809–1892) and Alfred Russel Wallace (1823–1913), to name but a few. As Brown & Lomolino (1998) point out, the first three themes of biogeography (distinctness of regional biotas, their origin and spread, and the factors responsible for differences in the numbers and kinds of species among local and regional biotas) were well established by the start of the 19th century. However, other, arguably younger natural science disciplines, such as ecology, have shown a far greater self-organizational ability than biogeography. For instance, whereas the *Journal of Ecology*, established by the venerable British Ecological Society, is now on volume 91, the *Journal of Biogeography*, is in a youthful volume 30, having been established as recently as 1974. For much of its history, biogeography has been published predominantly in learned monographs, or in specialist journals only partially focused on biogeography. That we are currently in an exciting phase of disciplinary growth is evidenced by the growth of *Journal of Biogeography* over the last 20 years. The latest volume, 29, was a massive 1720 pages, and was accompanied by two sister publications *Global Ecology and Biogeography*, and *Diversity and Distributions*. Yet, for most (perhaps all?) of us gathering in Mesquite, attending an international meeting dedicated to biogeography was a novel experience.

Biogeography has become a unifying field, providing an interdisciplinary and integrative understanding of the relationships between the earth and its biota. It provides a bridge, building on solid foundations in natural history, between disciplines of ecology, evolution and conservation. Yet, lacking dedicated international meetings, biogeographers rarely meet en masse. In one sense, this new society has arisen because there was an empty niche, a telling need for a forum where biogeographers can gather and exchange ideas. The mechanism by which this niche was filled was that Jim Brown, Mark Lomolino and Dov Sax submitted a proposal to the National Center for Ecological Analysis and Synthesis (NCEAS, funded by the National Science Foundation) which resulted in two workshops held at NCEAS in Santa Barbara in October of 2000 and September of 2001 under the banner *Foundations and Future of Biogeography*. The members of these workshops were drawn from six countries and from a wide spectrum of biogeographical traditions. These workshops have produced two main outputs.

First, the participants sat down to work out a selection of classic contributions to biogeography, which will appear, with commentaries, as *Foundations of Biogeography*, to be published later this year by University of Chicago Press (with initial royalties going to the NCEAS). It is to be hoped that this volume will provide an invaluable aid to those teaching biogeography courses, enabling a crash course in some of the more influential early writings and theories of biogeography. The idea of collating early writings for students of biogeography has been independently advanced by Charles H. Smith via his splendid *Early classics in biogeography* web site: <http://www.wku.edu/~smithch/biogeog/>. The selection of material for *Foundations of Biogeography* was great fun and of itself a learning experience, but one that like many biogeographical phenomena, might not be easily replicated were another, independent team to sit down to try it out. Nonetheless, the easy availability of a selection of the foundational literature will, we feel sure, be greatly appreciated by university teachers of biogeography.

Second, it was decided at the September 2001 workshop to found a new international society for the advancement of biogeography, and to hold the inaugural meeting in the first week of January 2003, just 15 months later. For practical reasons, it was decided to constitute the society within the USA and to hold the first meeting also within the USA. Therefore, the International Biogeography Society (IBS) was founded as a non-profit organization with the following mission:

- Foster communication and collaboration between biogeographers in disparate academic fields—scientists who would otherwise have little opportunity for substantive interaction and collaboration.



Figure 1 Some of the delegates at the inaugural meeting of the *International Biogeography Society*, Mesquite, Nevada, 4–8 January 2003. Photograph: Marcus Mika.

- Increase both the awareness and interests of the scientific community and the lay public in the contributions of biogeographers.
- Promote the training and education of biogeographers so that they may develop sound strategies for studying and conserving the world's biota.

Given the short interval to plan and advertise the IBS and the meeting, the organizers were delighted to have as many as 200 participants, and from more than a dozen different countries. However, for the society to achieve its goals of being a truly international society, representative of all shapes and forms of biogeographers, the founding members hope that the next meeting, which will probably be held in the first week of January 2005, will involve an even more international mix of participants. The second meeting will also be held in the USA, this time on the east coast, but the plan is that the third and fourth biennial meetings will be held elsewhere in the world. For details of the constitution of the society, its aims and its meetings, bookmark the web site: <http://www.biogeography.org>.

The first meeting was based around five symposia, featuring 25 speakers, and about 100 posters. The challenge invoked by the title of the meeting, *Frontiers of Biogeography*, was met admirably by the invited speakers of each symposium. The first symposium, *Dynamics of Diversity*, was able to capture the elements of a discipline that is coming of age. Instead of supporting a single explanation for patterns of diversity several of the speakers were able to show the importance of applying biogeographic theory in a context dependent manner that allows for an increased understanding of diversity patterns and the mechanisms responsible for them. The second symposium, *Phylogeography and Diversification*, provided similar evidence of biogeography's maturation as much of the old 'vicariance vs. dispersal' debate is now being replaced by a much more productive 'how much vicariance and how much dispersal' perspective on the assembly of biotas, geography of speciation, and relationships between areas of endemism. The third symposium, *Paleobiogeography*, showed how our increasing knowledge of biogeographical patterns in deep time, and continually emerging advances in technology that facilitate the description of palaeo-tectonics and palaeo-biogeography, are providing an ever increasing understanding of how the planet's past history has affected both past and present biotas. The fourth symposium, *Biogeography of the Sea*, offered the most holistic understanding of biogeography. It tied together elements of diversity, phylogeography and palaeo-biogeography in a concerted manner,

elucidating our understanding of biogeographic patterns in both the shallow and deep seas. The last symposium, *Biogeography Theory and Conservation Practice*, was instrumental in demonstrating the critical importance of using a biogeographical perspective in setting conservation priorities, agendas, and goals. In addition to the symposia, one of the most exciting aspects of the meeting was the outflow of excellent posters, which spanned all aspects of biogeography. These posters were featured in a dedicated block of time during the middle of each day, allowing these presentations to be a prominent part of the meeting.

Overall, the content and atmosphere of the meeting provided an unparalleled, almost Pangean opportunity for biogeographers to exchange ideas, learn from each other, and set the agenda for future work. Those attending left in no doubt that biogeography is a vibrant discipline, in which some theories we thought solidly founded perhaps only 20 or 30 years ago, we now know to be lacking; in which modern data availability, data-handling capacities, and analytical and modelling advances offer us truly exciting opportunities; and in which our discipline can and should make a substantial applied contribution to what may develop into the sub-field of *Conservation Biogeography*. The papers presented are to appear in an edited volume in 2004, forming the first in a new series *Frontiers of Biogeography* to be published by Cambridge University Press.

The topics of the second meeting of the Society have yet to be fixed, and in a modern, electronic sort of way, the members are to have their say in making suggestions. If you consider yourself a biogeographer, please consider joining the society in advance of the next meeting, the fees have been set deliberately low, at \$40 for two years, and there is an added perk of a cheap personal electronic subscription to the Journal of Biogeography package, by arrangement with Blackwell Publishing.

In closing their chapter on the history of biogeography, Brown & Lomolino (1998, p35) offer the following thoughts: "Given [the] long list of biogeography's conceptual achievements, in themselves the seeds of whole disciplines, one can easily comprehend how it has become impossible for one person to understand and follow completely all aspects of the field. Students of biogeography can be frustrated by their inability to comprehend all the subtleties of this awesome body of knowledge – or they can be challenged and encouraged by the prospect of using biogeography as a focal point to synthesize many separate disciplines and to acquire a unique perspective on the history and distribution of life on earth."

Biogeography might just be a subject on the cusp of a new flowering, and the *International Biogeography Society* one important vehicle to facilitate this. As for the gambling: the smart tip was to place your bets on number 42 (Silander, 2002), but most biogeographers know that the house always wins and resisted temptation.

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