## Can a Conservation-Oriented Scientific Society Remain Relevant in the 21st Century?

The right scale in work gives power to affection. Berry (1991)

Five years ago in the pages of this journal, Carroll et al. (2009) warned "Although the goal of globalizing the Society for Conservation Biology (SCB) is laudable, we have gone about it in a way that guarantees that the organization will shrink because it is not meeting anyone's needs for engagement and networking on a scale that is affordable and relevant to them professionally." Since that time, SCB's membership has declined by over onethird. Is this trend a consequence of the challenges arising from SCB's globalization, or of unrelated factors such as dues increases, or from the general challenges facing scientific societies in the 21st century? More importantly, how can SCB and other scientific societies with a conservation mission overcome these challenges and remain relevant to the community of conservation scientists and practitioners?

When SCB was founded in 1985, joining a scientific society provided access to a paper journal, as well as an opportunity to network with colleagues at annual conferences. Today, print journals have been largely supplanted by electronic versions, which are readily accessible to many academic conservation scientists via their university. An increased number of scientific conferences compete for attendees. As a result of these forces, smaller scientific societies have experienced a much starker downturn in membership in recent years than larger organizations (Potter et al. 2013). Potter et al. (2013) concluded that "membership-based organizations are broadly affected by six shifts that influence how individuals relate to their professional associations: increased competition for their time, an increased desire to see a return on their investment, more organizations competing for their attention, generational differences in the perceived value of membership, increased specialization of interest, and an increased expectation for technological adeptness."

The SCB, as a relatively small society compared with its peers in conservation-related fields, has been affected by these forces. While SCB's membership has declined since 2008, membership (as reflected in publicly reported membership revenue) of the larger Ecological Society of America remained stable, while that of The Wildlife Society declined sharply and then stabilized (Supporting Information). These latter organizations may be benefiting from economies of scale in organizing large annual conferences, as well as (in the case of The Wildlife Society) a renewed focus on membership recruitment and development of local chapters.

But SCB also differs from these organizations in being a global rather than a North America-based organization. This contrast adds additional challenges that compound the general trends threatening small scientific societies. Since 2002, SCB has been an integrated organization in which the 7 sections remain part of a single U.S.based fiscal entity (SCB-Global). In effect, SCB has settled on a partial transition from a single unified North American organization to a section-based global structure. This has resulted in SCB experiencing the challenges associated with a distributed organization without many of the related benefits. Because global conferences are cost-prohibitive for many conservation scientists, especially those associated with government agencies, section conferences continue to be a major engine for recruitment of new members. However, due to lack of local expertise, SCB-Global is of little assistance to sections in conference management. Similarly, association with a U.S.-based organization has provided the sections with little benefit in terms of regional fundraising and has in some cases been a barrier to securing grants from non-U.S. sources. Because SCB-Global's Executive Office retains an identity as both a (formally) global and a (practically) North American organization, growth of the North American section as a separate entity has at times been seen as duplicative of or in competition with SCB-Global.

The incomplete evolution of SCB from a national to a global organization has resulted in an unresolved debate between globalists and regionalists. Globalists prioritize the role of SCB at the global scale in addressing historical inequities in conservation science capacity between the developing and developed world and in building collaborations between scientists via global conferences. Conservation scientists may support these actions in part because they recognize that most biodiversity is in the developing world. There are examples of global scientific societies, such as the International Association for Landscape Ecology (IALE), that focus primarily on

1

publishing a journal and organizing conferences every 4 years. However, SCB's mission involves promoting both conservation science and practice, and our membership includes professionals associated with academia, government, and nongovernmental organizations (NGOs). This has led to suggestions that successful international conservation NGOs may be relevant models for a more effective global SCB. These organizations are typified by a professional model of organizational structure in which most activities of the organization are performed by paid staff (Supporting Information). Members interact with the organization primarily via their dues and other donations. Metrics of success for such organizations are related to increased fundraising, resultant expansion in staff, and ultimately improved conservation outcomes due to staff efforts.

The globalist model contrasts with the regionalist perspective, which is characteristic of small national scientific societies and of SCB's first 15 years. This perspective emphasizes a volunteer model of organization, where most activities of the organization are performed by members (in SCB's case, via involvement at the section or chapter level). Members who are most active as volunteers, but who may have little fundraising experience, dominate the organization's board. The main role of paid staff is to provide services to members. These services may include facilitating networking between members and training of members via the website, conferences, and other activities. The volunteer model characteristic of small scientific societies may be difficult to scale up to global organizations due to the more tenuous interpersonal connections between members on different continents.

In order for SCB to resolve the additional challenges that derive from its global nature and remain relevant to conservation scientists and practitioners in the 21st century, we must thoughtfully consider how SCB's structure can best serve the organization's goals. What activities make SCB of value to the conservation science community? How can we measure our success in achieving these goals? What scale or scales (global, regional, or local) are most effective for advancing these activities? What mixture of staff and volunteer effort is most effective and practical for each of these roles? How can an organization attract, motivate, and effectively use the volunteer effort of busy conservation professionals?

The global and regional perspectives may not be so much incompatible as differentially appropriate to different scales of SCB's activities. Most SCB members support using SCB's resources to build conservation science capacity at the global scale, including in the developing world. However, the existing organizational structure has not been able to simultaneously achieve this goal while maintaining SCB's viability as a scientific society in the developed world. The SCB's internationalization has left vacant the society's previous niche, which provided services such as annual conferences to North American scientists. This shift has especially affected students and early-career professionals who depend on such networking opportunities to build their careers.

The organization can help to resolve these issues by completing its evolution to a truly global organization that can operate effectively at multiple scales. One potential approach to achieving this goal involves instituting a process whereby regional sections can opt to establish themselves as semiautonomous entities (franchises) or remain directly affiliated with SCB-Global as a section. The franchise system, in which an organization grants regional affiliates license to operate semiautonomously, is used by several scientific societies and conservation NGOs such as IALE, the Society for Ecological Restoration, the World Wildlife Fund, and Earthwatch Institute. A hybrid franchise-section model would allow increased growth of the larger sections (as franchises) while freeing up SCB-Global resources that could be directed toward increasing the membership of smaller sections. Due to their increased autonomy, franchises could more effectively focus on activities appropriate to the regional scale (annual conferences, chapter development, fundraising from national governments). A franchise-based structure does not guarantee harmonious relationships between a global organization and its regional affiliates. However, because a franchise system better reflects the distinct but complementary nature of SCB's activities at the global and regional scales, this structure may allow the society to maintain its international reach while remaining relevant at the regional level in an environment that is increasingly challenging for small scientific societies.

## **Supporting Information**

Trends in membership income for conservation-oriented scientific societies (Appendix S1) and alternative organizational models for a global scientific society (Appendix S2) are available on-line. The authors are solely responsible for the content and functionality of these materials. Queries (other than absence of the material) should be directed to the corresponding author.

## **Carlos Carroll**

Klamath Center for Conservation Research, P.O. Box 104, Orleans, CA, 95556-0104, U.S.A. email carlos@klamathconservation.org

## **Literature Cited**

- Berry, W. 1991. Out of your car, off your horse: twenty-seven propositions about global thinking and the sustainability of cities. The Atlantic **267:**61-63.
- Carroll, C., R. F. Noss, J. Hilty, and S. C. Trombulak. 2009. Solving SCB's membership crisis by reinvigorating the sections: response to Schwartz et al. Conservation Biology 23:5–6.
- Potter, S., S. Musante, and A. Hochberg. 2013. Dynamism is the new stasis: modern challenges for the biological sciences. BioScience 63:705-714.