

## Letter to the Editor

# Response to *EcoHealth* Editorial, Parkes M.W. (2011) Vol. 8, Issue 2

To the Editor

I applaud Margot Parkes' efforts to situate the field of ecohealth in the context of a plethora of current initiatives that attempt to build bridges across ecology, health, and sustainability (Editorial Vol. 8, # 2, 2011). However, I find her account inaccurate, insofar as it suggests that “ecohealth” is a “turn of the 21st century idea”, and question her inference that forging links between health and ecology has taken place only over the past decade. This account leaves out the history of the development of the ecosystem health field with its numerous benchmark publications, conferences, and research and teaching activities (Rapport and Maffi 2011). To properly assess the relationship of ecohealth today to other current initiatives requires a more comprehensive understanding of its origins and development.

The International Society for Ecosystem Health (ISEH), which spanned a full decade (1991–2002), spearheaded more than half a dozen international meetings on ecosystem health, beginning with the 1st International Symposium on “Ecosystem Health and Medicine” (Ottawa 1994). ISEH-sponsored conferences included the International Congress on Managing for Ecosystem Health (Sacramento 1999) and the “Healthy Ecosystems, Healthy People” conference (Washington, DC 2002). Among the key goals of the International Society and its quarterly journal *Ecosystem Health* (1995–2001) were to encourage understanding of the critical links among human activity, ecological change, and human health.

Had Parkes' account made reference to this history, it would have become clear that “ecohealth” is neither new, nor a “turn of the century” field, but rather, has been a focus of inter- and trans-disciplinary research and practice since at least the mid-1970s (Rapport et al. 1979). The term

“ecohealth” encompasses the same range of topics subsumed under “ecosystem health”, and “Ecohealth”, incidentally, was the title that was used for the ISEH newsletter.

The initial impetus for the development of the trans-disciplinary field of ecosystem health which predates ISEH, arose not from academia, but from the practical needs of governments to report on the state of the environment and its relationship to human activity and well-being. In this endeavor, Statistics Canada (Canada's national statistical agency) was an early leader with its “Pressure-State-Response” model, developed in the mid-1970s. This model, which since then has underpinned numerous national and international efforts to report on the state of regional and global environments (including the Millennium Ecosystem Assessment), established a conceptual and statistical framework for linking human activities, ecological conditions, and human health.

Applications of the PSR model revealed that large-scale ecosystems under anthropogenic stress display marked signs of pathology with attendant risks to human health. This recognition has stimulated collaboration across the health, social, and natural sciences for over three decades (Epstein 1996; Rapport et al. 1998). With the formation of ISEH in 1991 (its founders were a small but eclectic group drawn from the fields of ecology, human and veterinary medicine, economics, law, engineering and ethics), and the establishment of its journal, the scope of the field became defined as:

“...a systemic approach to the preventative, diagnostic and prognostic aspects of ecosystem management and to the understanding of relationships between ecosystem health and human health. It encompasses the role of social values and attitudes in shaping our conception of health at human and

ecosystem scales. Its roots lie in clinical and epidemiological medicine and ecosystem science. Its focus is preventive, as well as curative and rehabilitative aspects.” (*Ecosystem Health*, Vol. 2 (1), Instructions for Authors, p. 96)

Among key topics developed in ISEH meetings and subsequent publications were relationships between human health and ecosystem health, relationships between ecosystem health and veterinary medicine, and relationships between ecosystem health and environmental management.

From early philosophical essays in the 1970s and 1980s on ecosystem medicine (Rapport et al. 1979) and ecosystem health (Rapport 1989), ecosystem health/ecohealth has continued to expand its scope and depth, through empirical investigations, the establishment of ecosystem health programs in professional schools (of human medicine, veterinary medicine, public health, and environmental management), the International Forum on Ecosystem Approaches to Human Health (Montreal 2003), and more. Along the way, the concept of healthy ecosystems (which encompasses human health and well-being) has been seeded in the mandates of numerous international organizations (including WHO, UNESCO, IDRC, IUCN), has spawned a number of university research chairs, and has become the focus of numerous government and academic research programs. The journal *EcoHealth* (a direct descendant from *Ecosystem Health*, as its founding editor was chosen by the ISEH executive board) and the IAEH play an important role in furthering and deepening our understanding of the many dimensions of ecohealth.

As Parkes points out, ecohealth is part of a growing family of transdisciplinary fields. These are broadly focused on a similar overarching philosophical concept, perhaps no better stated than in the concluding stanza of Juan Almendares’s dedication to the “scientists and friends of humanity... on the occasion of the 1st International Symposium on Ecosystem Health and Medicine, June 1994” (Almendares, 1995):

“Science, love, ideas, colors,  
Smiling biodiversity and spirituality,  
All embraced.  
Realizing  
The living health  
Of the whole of life,  
Without hierarchies.”

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## RESPONSE

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Attention to history and precedent are vital elements of the scholarly endeavor and are especially important to a field as diverse and emergent as ecohealth. David Rapport’s reflections on my editorial “*Diversity, Emergence, Resilience*” (Vol. 8, No. 2, 2011) provide important reminders of the different ways in which histories are told and interpreted, and about the question of “where and when to begin”, in a field that positions itself among a “series of converging and iterative efforts” (Parkes 2011).

Certainly, ecosystem health and the works cited by Rapport were highly influential on my own commitment to research, education and practice at the interface of social, natural and health sciences – providing an entry point to decades of precedent and integrative effort. Some would agree, therefore, that ecosystem health warrants explicit attention as one of the ‘converging lineages’ referred to in my editorial. Others would note that ecosystem health is widely referenced, embedded and detailed within the works that were cited in my editorial as recent efforts to reflect on and consolidate the foundational lineages of ecohealth (see

Webb et al. 2010; Charron 2012). Still others might see ecosystem health, ecohealth and related ideas as a revisiting of Leopold's "Land Ethic" (1949), or a re-engagement with teachings of Indigenous elders, or perhaps a rediscovery of Hippocrates "Airs, Waters, Places".

Beyond citations and acknowledgements, Rapport's reflections highlight a critical feature of history, narrative and evolution of scholarly efforts that are essential to the reciprocity and learning that characterize ecohealth. I refer in particular to *conferences and education*—and the opportunities to learn from, with and about our diverse peers and colleagues when we convene (see also Parkes 2012). Rapport's reference to Juan Almdares' poem from the 1994 "Ecosystem Health & Medicine" conference offers a streamlined reflection on the themes of diversity, emergence and resilience that my editorial had sought to address—and highlights age-old challenges that will continue to be revisited.

In closing with the words "without hierarchies", Almdares points to a central challenge for endeavours like ecohealth and demands reflection on differences arising when knowledge and history are viewed as typologies rather than taxonomies (Bailey 1994). Valerie Brown (2012), a plenary speaker at the EcoHealth2012 conference in Kunming, China highlighted similar themes by exploring shifts from 'or' thinking toward 'and' thinking, and the value of collective learning as we navigate the converging questions and epistemologies informing ecohealth, its history and its future. The diverse delegates of EcoHealth2012 (62 countries!) and equally diverse conceptual interactions, place Rapport's letter in the context of ongoing opportunities to listen to and share the personal stories and scholarly lineages that inform why and how people get involved with

ecohealth. EcoHealth2012 was the latest in a series of reminders—suggesting that revisiting, challenging, and rediscovering long-standing questions are a treasured part of our collective journey, and offer fertile ground for the transformative changes required to realize a healthy, just and sustainable future.

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