

Editorial: ‘Food for Life’: Looking beyond the horizon

The exciting challenges for a journal editorial team include attracting papers based on quality science, providing an efficient screening process, completing reviews and making decisions in a timely fashion, and producing a journal that will be internationally accepted, useful to readers and make a practical impact in the field. To accomplish this we depend on good management and a supportive publisher and staff. Success could be measured by the number of articles submitted, the rate of acceptance and of course the number of subscriptions and renewals. At present, these indicators are positive for *Renewable Agriculture and Food Systems*.

Yet the above indicators represent the minimum criteria for scientific and practical credibility. To be sure, a journal must report the results, analysis and interpretations of completed research, and in the case of *Renewable Agriculture and Food Systems* we also value the practical implications for development of enhanced and more sustainable farming and food systems. Too often we observe that research reported in our journal as well as in most others deals with production and economic challenges that are of the moment, and for which many answers have already been tested and discussed. In this way, we add to the storehouse of credible scientific knowledge, but will this research have an impact on the real needs of people, today and into the future? It is important to note that most research initiated today will not yield applicable results for at least 5 years—even longer in the case of plant breeding, crop rotations or soil quality. Our real challenge appears to be anticipating what the major challenges and constraints will be to food production and distribution a decade or more into the future. This could be called ‘Beyond the Horizon’ thinking.

To this end, the team of Associate Editors was asked to look down the road in the food system and to provide suggestions on where we are headed, what constraints will be important in the near- and medium-term future, and what the journal could do to focus more on emerging issues. A small group then met in Pittsburgh during the international meetings of the American Society of Agronomy in November 2009 to discuss and debate potential long-term strategies for the journal. Discussions were preceded by an e-mail calling for each Associate Editor’s personal visions of how *Renewable Agriculture and Food Systems* serves to illuminate and further the task of renewing Earth and its people and the general vision of ‘Food for Life’. Responses included recognition that achieving renewable agriculture and food systems is an international goal that must deal more with the socio-political challenges of meeting future food needs using scientific and ecologically based systems that enhance the environment and address critical issues such as climate change and diminishing resources.

In order to bring focus to the challenge, we found it essential to recognize the most likely and overriding constraints to future food production. Today there is little disagreement over the massive depletion on a global scale of two essential inputs to agriculture: fossil fuels and fresh water. We also recognize that phosphorus is found in concentrated form in only a few deposits in nature, and that agriculture is rapidly using this limited resource and dispersing it through harvested products and soil loss from fields in forms that make it economically unavailable for recycling. Less recognized is the increasing occurrence of severe weather events. As pointed out by Forum Editor Fred Kirschenmann, we are moving from two centuries of relatively benign climate that was highly conducive to stable agricultural yields to a time of more frequent droughts, floods and other potentially disruptive weather events. Are we effectively developing a food production system that will give resilience in the face of uncertainty and major fluctuations in natural conditions? Or do we see the future as a simple extrapolation of the past?

The editorial team strongly believes that we should create a journal that addresses these emerging realities and create a forum for logical discussion of how and why to choose achievable, resource-efficient farming systems. We can encourage new directions by establishing critical topic issues, such as a forthcoming special edition on *Sustainable Agricultural Systems in a Resource-Limited Future* edited by Welsh, Oberholtzer and Dimitri. Recognizing that agriculture and food represent a global challenge, the journal is attracting more articles from the international scientific community, beyond the borders of North America and the European Union, as reflected in the current issue of the journal. In addition to broadening our spatial focus, it is important to seek a more robust profile in transdisciplinary studies—often called multidisciplinary or interdisciplinary research—that embrace the production, economics, environmental and social dimensions of the food challenge. However, as stated by Eksvärd in this issue, ‘moving from conventional research approaches to transdisciplinary approaches is not easy and includes the need to relate the contextual knowledge of farmers to the abstract knowledge of scientists’. To pursue this focus is to create a unique niche for *Renewable Agriculture and Food Systems*.

We welcome future submissions to the journal, covering topics that fulfill the overall goal of meeting future food demands in a changing global environment while making maximum use of locally available renewable resources. Integrative papers that look at complex production systems—multiple cropping, crop/animal systems, long-term rotations, permaculture and agroforestry—come to mind. Papers that deal with whole farm systems, as well

as landscape-, community- and regional-level food systems will be valuable to those in planning and in resource allocation for investigation. Research that combines biological and social science methods has a better chance of addressing complex challenges and uncertainty, and especially those issues that include a strong component of human decision making. Important to us will be topics dealing with integrated approaches that balance needs for production with those for environmental stability such as conservation tillage in organic farming systems, biologically intensive agriculture and life-cycle analysis of nutrient use in agricultural systems to name a few. Political dimensions of agriculture and food systems are highly important, and in fact too critical to be left exclusively to the domain of economists, lawyers and politicians. Contrary to the conventional wisdom of most agricultural scientists, these are important researchable questions that should be pursued and the results published.

Among the characteristics that we consider likely to embody future agriculture, looking 'Beyond the Horizon' as a group, we consider it important to study and develop systems that:

- Depend largely on contemporary energy, current sunlight rather than scarce fossil fuels.
- Make highly efficient use of limited water supplies, saving expensive irrigation for production of high-value crops.
- Integrate crops and animals in ways that cycle and make efficient use of nutrients.
- Make efficient use of human urine and feces as well as those from domestic animals, an essential step in nutrient cycling for the future.
- Display biodiversity and resilience in the face of unpredictable and extreme weather events.
- Favor owner-operated and managed farms of a reasonable scale that contribute to local economies and food systems.
- Encourage beginning farmers, women entrepreneurs and minority groups to become more active in the commercial food system.
- Reflect the unique role of local people and groups in human-managed agroecosystems.
- Recognize the overriding importance of ecology and uniqueness of place in the design of agricultural systems.

Organic agriculture is one alternative that has grown rapidly over the past two decades. A valuable international history of organic production has been assembled by Dr William Lockeretz, former editor of *American Journal of Alternative Agriculture*, the forerunner to this journal (see book review, this issue). Two other books also appearing in the past year (Kirchmann and Bergström, 2008; Francis, 2009), as referenced in the above book review, provide contrasting views of the science and the future of organic farming and food systems and should be consulted along with the Lockeretz history to gain multiple perspectives on this growing, and at times controversial, option for the future. It is this type of issue that *Renewable Agriculture and*

Food Systems needs to address through solid science and through commentary articles by readers. We also recognize the often futile results of research dealing with controversial topics (see Francis commentary, this issue), although discussing controversies is essential to address the larger challenges and myths that abound in our profession when we have the appropriate methods and statistical analyses needed to reach convincing conclusions.

These are some of the directions that appear important to our editorial team. We must find ways to deal effectively with the future, and to shape systems to meet human needs across the economic spectrum and around the globe. Those solutions that benefit only a few in society do not provide stability or sustainability, nor do they create an equitable and desirable future. As always, the editorial team invites ideas from our authors and readers, and we especially welcome topics for special issues in the future as well as recommendations and volunteers to be guest editors for an issue of *Renewable Agriculture and Food Systems*. Above all, we invite you to join us in this quest to develop productive, dynamic, biodiverse, flexible, renewable and sustainable farming and food systems for the long-term future.

The Editor-in-Chief would like to extend thanks to the many reviewers who provided timely, substantive and insightful reviews for *Renewable Agriculture and Food Systems* in 2009. Your efforts and those of our Associate Editors have resulted in a quality journal that enables the online publication ahead of issue printing within 4 to 6 weeks of individual manuscript acceptance and an average of 90 days from submission to decision. Gratitude is also extended to the journal support staff of Cambridge University Press for outstanding management of the editing, production and marketing of the journal. An easily recognized indication of the journal's advancement is the rise of the Impact Factor between 2005 and 2009 from 0.3 to 0.9.

A special welcome to Jacqueline Clark who joined the *Renewable Agriculture and Food Systems* team as Editorial Assistant, with a background in Sustainable Development, and to John Beeby from Cornell University who joined the Associate Editor's Board this past year. Thanks are extended to Richard Auler, Ladybird Organic Farm, Co. Tipperary, Ireland who retired from the Editorial Board in 2009.

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