

2009 Candidate Emerging Issues

The candidate issues described briefly here, from which the 2009 top-three were ultimately selected, were identified during the 2009 implementation of the emerging issues process that began at the 2008 Reno Convention:

- **Making the Best of Land-Use Conversion** – Change in private-industrial land ownership away from forest management has unintended impacts. Besides the ecological impact, there may be a shift to “back-yard” forestry as land is converted to subdivisions. The focus will then be on homeowners as managers of fragmented trees and woodlots. An opportunity to work with a different client, as well as alerting the public to the ecological and business consequences (fragmentation, isolation, destruction) of conversion.
- **Climate Change Effects on Species** – Few doubt that the climate is changing, but what can managers do about it? Several forest management coping strategies have been proposed, but few of these are based on rigorous science. Managers need answers based on good science.
- **Biomass and Energy** – While biomass utilization for energy generation can be positive, there is also potential for deleterious, long-lasting impacts on natural systems and ecosystem services. Best management practices should be developed for biomass utilization.
- **Carbon Markets for Forestry Activities** – Much better science is desired to ascertain what constitutes new carbon sequestration. People are buying carbon credits, yet we know little what effect a particular forest management strategy or natural events will have on carbon storage.
- **Effective Marketing and Business Tools for Forest Science** – Because of large scales, complexity, and long times involved in forestry, we need better methods of production, oversight, marketing, and communication.
- **Make Science Information Free** – Locking up science is an antiquated information dissemination model. Scientists and professionals seek high impact for their work, and SAF proceedings articles under the current model cannot deliver that. Web and other delivery should be considered.
- **Precision Forest Inventory** – There is a need to improve forest inventory methods as demand for information on change and trend becomes insistent, and the number of forest attributes of interest expands beyond merchantable volume. Improvements in precision are imperative as management objectives and world economies change.
- **Dwindling Training and Knowledge of Statistics** – Because of climate change, plummeting economies, and other considerations, managers are increasingly challenged to make decisions about an uncertain future. Interest and participation in statistics has been steadily decreasing over the decade at a time when the need for their understanding is great. As an example, it is not clear that there is a widespread understanding of the aspects of choosing alpha in a risk tradeoff with beta regarding the respective danger of a Type I (calling a difference real when it really is not) & Type II (calling a difference not real when in fact it is) error.

- **Obliviousness to Connections Between Fire, Forest Management, and Larger Issues** – As we shift from a rural to an urban society, fewer people identify with the traditional values of our forests and there is decreasing public knowledge of forest management and the consequences of non-management. Issues include increasing wildfire/pest occurrence and damage, increasing building material and construction costs, and increasing demand/impact to foreign forests and societies as a result of non-management of U.S. forests.
- **Invasive Species** – The way that exotics are arriving, being introduced and our use of mitigation methods is changing. Likewise, once invasive pests become established, traditional methods of eradication (sanitation) are not always acceptable. New detection, prevention, eradication, and impacts determination methods need to be established.
- **LiDAR: The New Photogrammetry?** – As LiDAR is rapidly coming of age is “real” photogrammetry dead? Can we reduce expensive field-visit verification by applying the tried and true methods of photogrammetry and get creative about LiDAR/hyper-spectral image fusion? Will we soon reach a point of such data-richness with such temporal currency that we live in a world with a continual census of the entire forest resource?