Evaluation of Research and the Scientific Basis of Native-Plant Selection in Ecological Restoration

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"There is as yet, no sense of pride in the husbandry of wild plants and animals, no sense of shame in the proprietorship of a sick landscape"
(Aldo Leopold)

That statement is no longer true. The current danger is our zeal to be "natural" while overlooking biological realities and ignoring tools our predecessors developed for attending to "sick" landscapes. There are vigorous arguments for limiting the genetic diversity of seeds used in ecological restoration. This contrasts with work by Harper, Stutz, Meyer, ourselves and others and disregards the process of change in plants and their environments. It ignores evidence that large genetic pools promote stability by providing evolutionary resources; that seed mixtures supporting genetic diversity and robustness enable successful plant responses to environmental change. Genetic diversity among and within populations is the foundation on which ecologically stable plant communities are based. Our society's ecological restoration priorities should be based on the sciences including genetics, physiology, climatology, and ecology. It is essential that facts replace assumptions. Different viewpoints are as beneficial to our society as gene-pool diversity is to sustainable restoration. However, if we lose track of what is fact and what is fancy, if scientific credibility is "spun" away and resource management and ecological restoration are based on unproven conjecture and supposition, then, where there is pride it will be false; where there is husbandry of wild things, it will be misdirected; and where there are sick landscapes, there will be no sense of shame in their proprietorship.