

Standards for Good Ecological Restoration

While doing the research for his article in this issue about the business side of ecological restoration, Brian Lavendel heard from several business owners that they felt there was a need for the field of restoration to establish standards. Such standards, they believe, would hold everyone to the same level of excellence in the pursuit of good restoration.

Are these business owners correct? What is there to say about developing standards for ecological restoration? Standards, as you know, are the “buzz” in our business-modeled world no matter whether we’re talking about students in the classroom, automobiles on the assembly line, or stocks in the retirement portfolio. Today, everything and everyone has to “perform” and be counted. In some ways, I am reminded of the Efficiency Movement of the early 20th century in the United States.

So, when are “restorationists” going to wise up, gear up, and face up to the fact that their work, practice, and volunteer efforts should be done according to some standards? While I’m not sure of the answer to that question, I would like to offer some thoughts about developing and applying standards to ecological restoration.

First, let me say that I think standards can and should be developed at several levels from the general to the specific. It seems to me that many restorationists are more familiar with standards for specific cases. These standards are better known as specifications. Specifications are the heart-and-soul of the contract between restorationists and their clients be they an individual, corporation, or government body. Specifications provide the detailed information about the size, quantity, quality, amount, place of origin and so on of materials and plants used in restoration projects. These are the standards for the products used in the restoration.

Specifications are also written as part of the work plan document to describe how and where a specific restoration task should be done. These specifications are the standards for how the process of restoration should be carried out.

Recently, Andy Clewell, John Rieger and John Munro in “Guidelines for Developing and Managing Ecological Restoration Projects” (www.ser.org/reading.php?pg=guidelines), have made a call for including performance standards in every restoration project. In reality, performance standards are really specifications that indicate the levels of establishment or growth for items planted or for the minimum number of “targeted” species expected to repopulate the new habitat. They are the measurable criteria we use to determine whether or not a project has achieved its ecological and/or social objectives. Naturally, they must be tied to specific monitoring protocols.

These specifications are important parts of bringing a standardized level of workmanship to any restoration project. However, specifications and performance standards are not general principles. They are instead developed on a case-by-case basis. Thus, while there can be some “boilerplating” of previous specs and performance standards, the restorationist and the client must ultimately agree on a specific set of standards that fits the specific situation.

I think that we also need to consider more general, more basic standards that, as much as possible, apply to ecological restoration projects everywhere. These more basic standards should serve as principles that guide restorationists in the development of specifications and performance standards. They also should be recognized and agreed to by the restoration community at large—a discussion that I think that members of the Society for Ecological Restoration should begin in earnest.

I’d like to use this forum to begin that discussion and offer the following list of general standards or principles for a good ecological restoration, in no particular order of importance:

- Do no harm—work to protect the environment rather than restore the environment
- Work from an ethical position as well as a business position
- Ensure that restoration work protects the safety of the workers and the environment
- Pay workers a living wage; provide volunteers with non-monetary rewards
- Provide adequate job training to both paid workers and volunteers
- Strive for ecological accuracy in terms of restoring system functions and/or composition
- Seek out the local context; avoid imposing national or regional solutions
- When the opportunity exists, make research part of the restoration process
- Develop an esprit de corps among workers, volunteers, and community
- Monitor the results, and make corrections accordingly
- Publish your findings, both the successes and the failures

I’m sure there may be more general standards that we should discuss, but I present these as a starting point. I hope others will take the time to consider this humble suggestion to move the field and experience of ecological restoration forward. I’d like to hear from you.

Dave Egan