Abstract

As ‘human domination’ of ecosystems is growing significantly (Vitousek et al., 1997), public awareness and stewardship of environmental quality become more critical. Landscape ecology has advanced our understanding of landscape pattern and process, yet its influence on society has been less significant (Nassauer and Opdam, 2008), or even invisible to the public. The gap between science and landscape practice is further amplified in China due to its dramatic landscape alteration and urbanization of the last three decades. Landscape design mediates our social and cultural understanding of ecological quality and change. Nassauer and Opdam (2008) concluded that besides pattern: process, design is an integral component of the landscape ecology paradigm. Designers should undertake the responsibility and opportunities to bridge the gap between science and landscape practice. In this paper, the designer's role in applying and promoting public understanding of landscape ecology is discussed through two landscape architecture cases in China completed by Sasaki Associates. The two chosen cases represent the types of landscape projects that are altering contemporary urban landscapes in many Chinese cities. Working with the local governments as clients, designers were able to make recommendations that directly impacted not only the specific design but also landscape policy making. These linkages between design recommendations and policy changes created potential research opportunities to propose, execute and measure the consequences of landscape modification.

The first case is a 70 ha central urban park in the Jiading district of Shanghai, which is currently being constructed on a landscape that includes a former industrial site. Native species are being planted in the park in order to promote local identity and biodiversity awareness. Previously, a limited commercial availability of native species had discouraged native planting design; thus by requesting a large quantity of diverse native species, we also helped promote the market for native plants. Selecting native plant communities, we restored wetlands to provide environmental amenities and ecological functions, including stormwater management and wildlife habitat. The second case study addresses a strategic land planning and ecological restoration effort for Qilihai, approximately 60 km of severely degraded coastal sand dune and lagoon in the coastal city of Qinhuangdao, China. Working closely with the local and provincial governments, we advocated a cautious development plan with a strategic road framework to regulate future urban growth. We identified a concentrated development area with the smallest ecological footprint that would also offer accessible recreational amenities.

Public awareness and appreciation of an ecological environment is a critical driving force to achieve a more sustainable society. In this long-term process, designers can make ecology visible, tangible, and easily understandable to the public.

References


