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Landscape Ecology

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America, especially in the United States. An increase

environment of sound (or sonic environment) with emphasis on the way it is perceived and understood by the individual, or by a society." As of this writing (2011), the International Standards Organization (as ISO Working Group 54) is in the process of rigorously defining the term and proposing standards for evaluation strictly on the perception and interpretation of an acoustic environment. Given the casual application of "soundscape" in a variety of contexts this initiative is welcome. However, a more inclusive redefinition of "soundscape" will challenge the dominant field of acoustics and acoustical engineering, which has traditionally treated sound objectively as a quantifiable entity, including measurements of the effects of noise.

An original member of the WSP team, Barry Truax, extended the subjective concept of soundscape during the 1980s to what he termed a communicational, information-based model. In his book *A* -

(Truax 2001), he attempted to integrate the objective approach of acoustics and subjective approach of soundscape studies. In this model, sound results in meaning based on two types of information and knowledge provided by the listener: (a) information gleaned from the properties of the sound itself—such as its spectral and temporal patterns, and (b) listener's knowledge of the environmental, social and cultural context. Furthermore, the listening process can occur at different levels of attention, ranging from a foreground, more analytical level, through to a background, distracted or habitual level. At a macro scale, sound is not merely energy and information exchange, but is capable of mediating (and even symbolizing) relationships between listeners and their environments, reflecting a dynamic system of behaviors characteristic of an ecological approach. This approach is readily adaptable to the introduction of the electroacoustic mediation of aural experience that has increasingly characterized the last century, where patterns of sound and listening become more standardized and subject to economic constraints.

In 1993, a conference was held at Banff, Alberta, to

suggest that sound

Concluding remarks

Soundscape ecology is an emerging paradigm in the field of landscape ecology. Soundscape ecology as an

