NRESI RESEARCH COLLOQUIUM SERIES

FRIDAY

Feb. 1, 2008

3:30 - 4:30 pm

LECTURE THEATRE

7-150

LIGHT REFRESHMENTS SERVED AT 3:20 PM

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

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NatureServe

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Assessing the Ecological Integrity of Ecosystems Using a Dynamic Reference Set

Ecological integrity may be defined as:

> *". . . an assessment of the structure, composition, and function of an ecosystem as compared to reference or benchmark ecosystems operating within the bounds of natural or historic disturbance regimes."*

Thus, ecological integrity assessments provide an assessment of the likelihood that, if current conditions prevail, an occurrence of an ecosystem will retain its level of structure, composition and function.

For over twenty-five years, NatureServe has advanced approaches for documenting the viability and integrity of individual occurrences of species and ecosystems. Earlier methods relied on fairly qualitative, expert-driven protocols. More recently, the NatureServe ecology methodology has been revised to better reflect an indicator-based approach, one that emphasizes specific indicators to assess the ecological integrity of aquatic, wetland, and terrestrial ecosystems. We introduce the current purposes of the methodology, provide an overview and examples, and suggest plans for its implementation in collaboration with our Network of state and provincial Natural Heritage Programs and federal partners.