The Shared Characteristics of Traditional Ecological Knowledge and Western Science*

**Traditional Ecological Knowledge**
- Holistic
- Includes physical and metaphysical well-being linked to moral code
- Emphasis on practical application of skills and knowledge
- Trust for inherited wisdom
- Respect for all things
- Practical experimentation
- Qualitative oral record
- Communication of metaphor and story connected to life, values, and proper behaviour
- Integrated and applied to daily living and traditional subsistence practices

**Common Ground**
- **Organizing Principles**
  - Universe is unified
  - Body of knowledge stable but subject to modification
- **Habits of Mind**
  - Honesty, inquisitiveness, perseverance, open-mindedness
- **Skills and Procedures**
  - Empirical observation in natural settings, pattern recognition, verification through repetition, inference, and prediction
- **Knowledge**
  - Plant and animal behaviour, cycles, habitat needs, interdependence, properties of objects and materials; position and motion of objects; cycles and changes in earth and sky

**Western Science**
- Part to whole
- Limited to evidence and explanation within the physical world
- Emphasis on understanding how
- Skepticism
- Tools expand scale of direct and indirect observation and measurement
- Hypothesis falsification
- Global verification
- Quantitative written record
- Communication of procedure, evidence, and theory
- Discipline-based
- Micro and macro theory
- Mathematical models

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