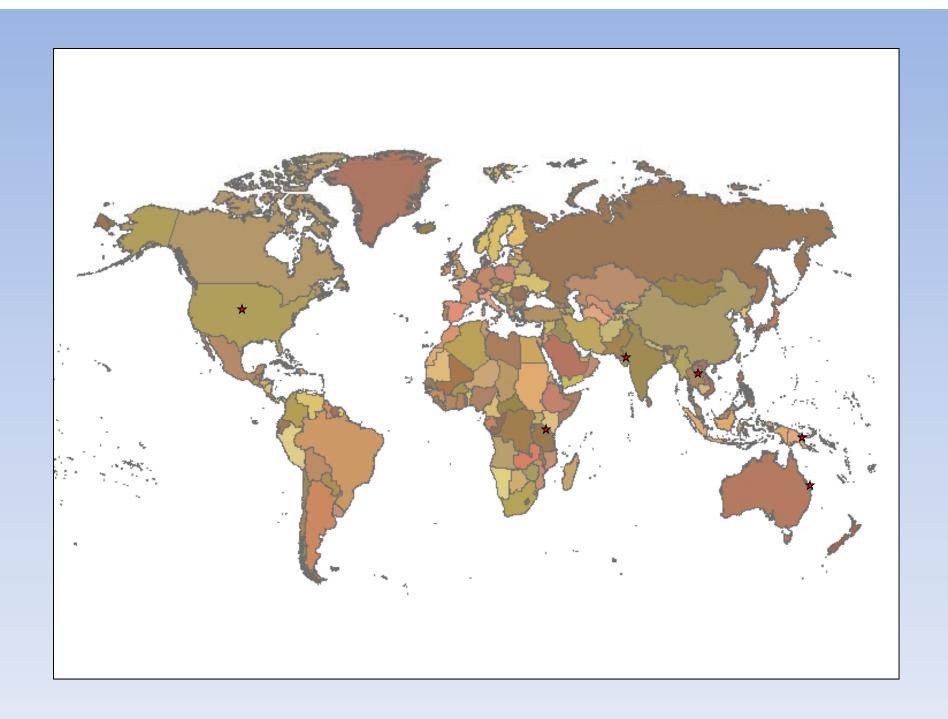


Can collaboration genuinely integrate Indigenous perspectives into global natural resource development and management? Political Issues

- Requires Relinquishing Extremes of both
 Scientific Positivism AND Indigenous Knowledge
 - No Reductionism
 - Holistic Integration and Understanding
 - Accept the flaws in both systems
 - Acknowledge differences in Power

Can collaboration genuinely integrate Indigenous perspectives into global natural resource development and management? Philosophical Issues

- Culture creates different ways of knowing
- As cultural beings, can we actually function outside of our own cultural metanarrative



| EPISTEMOLOGICAL BARRIERS | |
|---------------------------|-----------------------------------------------------------------------------|
| Barrier | Description |
| A | Lack of recognition that Indigenous knowledge once had a place in |
| IK not recognized | natural resource management. |
| В | Narrow definitions of concepts of 'tradition' and 'custom'. |
| Narrow definitions | |
| C | Indigenous peoples' expertise and connection to the land or seascape is |
| Non-validation of | not deemed to have been 'proven' to the satisfaction of scientists and |
| IK | resources management bureaucrats. |
| D | The need for Indigenous peoples to translate their knowledge into |
| Translation of IK | frameworks that are widely understood by scientists and managers. |
| E | When knowledge is expressed in a social or spiritual, rather than a |
| Social/spiritual | scientific, framework, scientists often find the relevance of such |
| expression | information challenging. |
| \mathbf{F} | The need to write down information, which can lead to Indigenous |
| Codification of IK | concerns about codification and appropriation of knowledge |
| G | Barriers that arise when Western systems of property rights (including |
| Ownership of | intellectual property rights) are imposed over Indigenous ways of |
| knowledge | controlling and managing ownership of knowledge |
| Н | Barriers that occur as a result of a system that requires land and water to |
| Spatial/temporal | be bounded spatially and temporally via the demarcation of areas on |
| boundaries | maps or within chronologically defined management planning systems |

| SYSTEMIC OR INSTITUTIONAL BARRIERS | |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I 'Outsiders' kept 'outside' | Bureaucratic arrangements such as meeting requirements and government institutional structures make the involvement of any 'outsiders' difficult. |
| J IK & management institutions | Barriers that occur when Indigenous knowledge cannot be accommodated within reductionist and formulaic approaches to management such as are found in management manuals. |
| K Decentralization | Barriers that arise as a result of the decentralized nature of Indigenous concepts of governance and decision making. |
| L | Obstacles based on assumptions of racial or cultural inferiority; some |
| Racial/cultural inferiority | 'races' or cultures are seen as categorically inferior, practicing inherently destructive or under-productive forms of livelihood, and incapable of possessing complex knowledge of nature. |
| M State power | The State has more power than Indigenous people do, and so has greater control. Indigenous people must therefore strategize about how and when to assert their concerns more carefully than the State does. |
| N 'Benevolent' West | The State is assumed to act benignly, despite obvious resource degradation under the State's watch. Indigenous people must prove that State actions have been detrimental. |
| O Globalization | Barriers that result from the need to meet global environmental challenges on global (often theoretical) scales, rather than on the local scale used in Indigenous knowledge systems. |



Pine Ridge

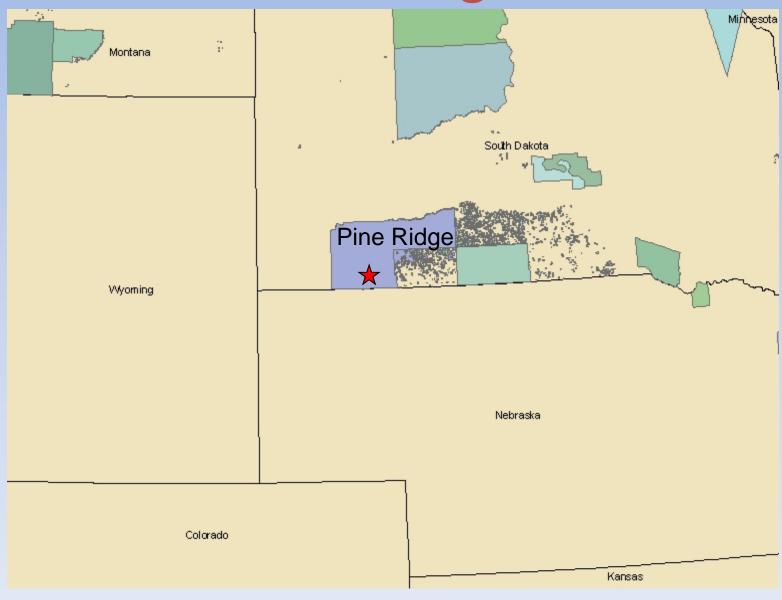
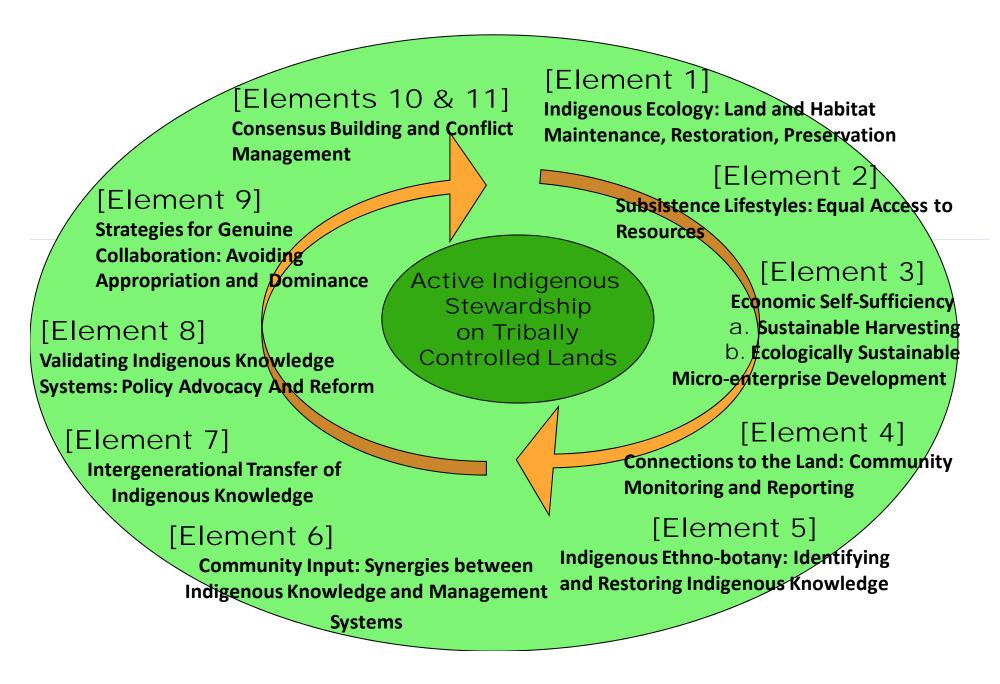


Figure 1: Elements of the Indigenous Stewardship Model



Livelihood Activities in the Ecosystem

practical activities which create linkages

among humans and other constituents of an ecosystem

Cultural Identity and Sense of Place

relational networks and perceptions that people build through on-going practical experiences and communication with the emergent

properties of particular ecosystems

Relational Networks

networks of relationships among people and other species, provides feedbacks among the inhabitants and allows for appropriate adjustments in behavior

Institution Building

harvesters collectively codify and reformulate specific rules of harvest, property rights allow flexibility to generate specific institutions out of practical engagements with the ecosystem

Knowing-Learning-Remembering

emphasis on supporting/ re-engaging people in the processes of knowing,

learning, and remembering an ecosystem through practical activities. knowledge transmission among groups and between generations

The Dwelt-In
Ecosystem:
Receptiveness
between Livelihood
and Nature

Embeddedness

social structures, cultural values, institutions, and behavior of individuals embedded within ecosystem processes

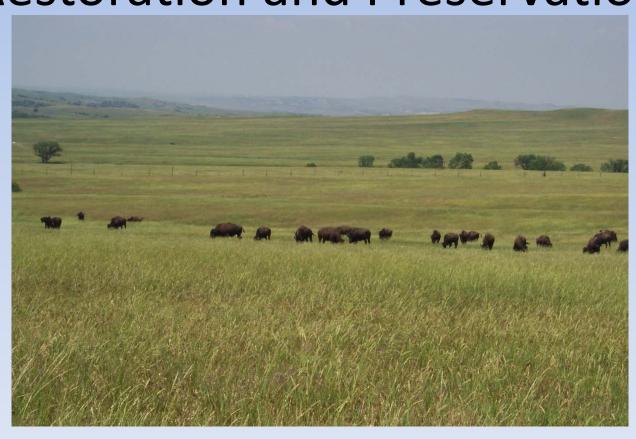
Spatially Bounded Management Units

development of collaborative relationships and institutional arrangements with other local communities and property owners for community-based stewardship and ecosystem monitoring

Overview

- Application of Indigenous Ecological Knowledge to
 - National Parks and Protected Areas
 - Areas of Indigenous Historic / Sacred Significance
 - All Lands, Human Relationships with the Environment Generally
- A Guide, Not a Proscription
- Developing a Common Language of Exchange, not dominance

Element 1: Indigenous Ecology: Land and Habitat Maintenance, Restoration and Preservation



Element 2: Subsistence Lifestyles: Equal Access to Resources

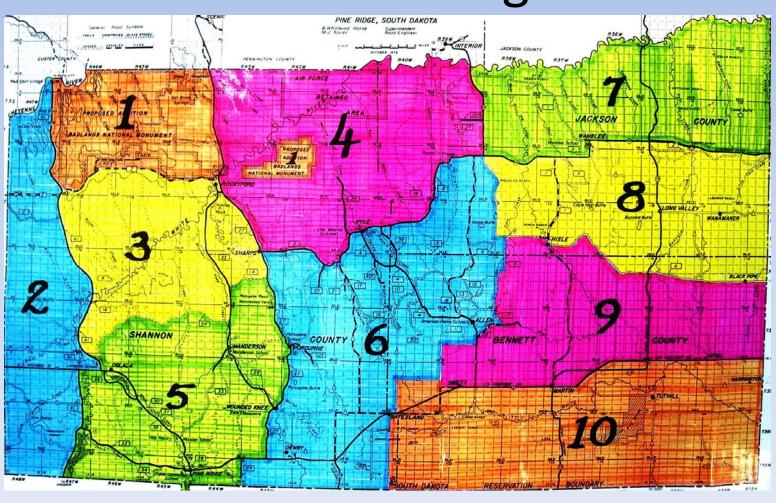


Element 3: Economic Self-Sufficiency

- a. Sustainable Harvesting
- b. Ecologically Sustainable Microenterprise Development



Element 4: Community Connections to Land and Monitoring



Element 5: Indigenous Ethnobotany: Identifying and Restoring Indigenous Knowledge



Element 6: Community Input: Synergies between Indigenous Knowledge and Management Systems



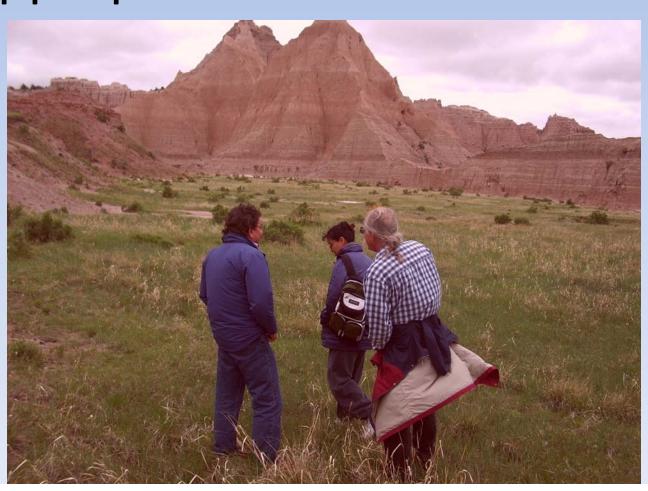
Element 7: Intergenerational Transfer of Indigenous Knowledge



Element 8: Validating Indigenous Knowledge Systems: Policy Advocacy and Reform



Element 9: Strategies for Genuine Collaboration: Avoiding Appropriation and Dominance



Elements 10 and 11: Consensus Building and Conflict Management



CONCLUSIONS

- Cultural Constraints Around Knowledge Systems
 Must be Recognized
- Cross-Scale "Institutional" Linkages: Implement New Arrangements
- Cross-cultural Communication
 - Asking and Listening
 - Developed Shared language and concepts
 - Respect for Differences



Your Questions and Experiences

