




Integrating Human Dimensions into Wildlife and Invasive Species Management


The Alberta Invasive Species Council Webinar Series
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“There are two things that interest me: the relation of people to each other and the relation of people to the land.”

Aldo Leopold



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“...humans seem to have gained a high degree of independence from the natural world. ...Humanity appears to have very nearly lost a sense of deep connectedness to nature.”

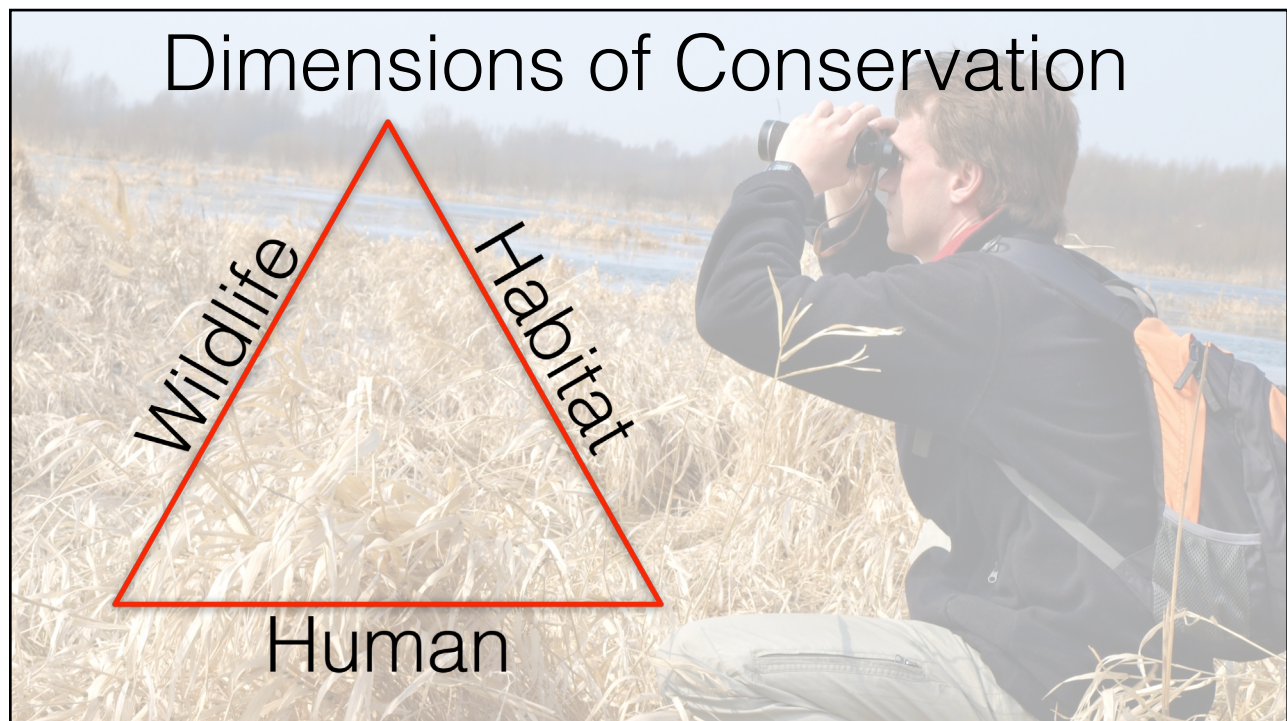
Rick Searle (2000)

“The biggest single threat to conservation in America is the growing disconnect of our people with the outdoors.”

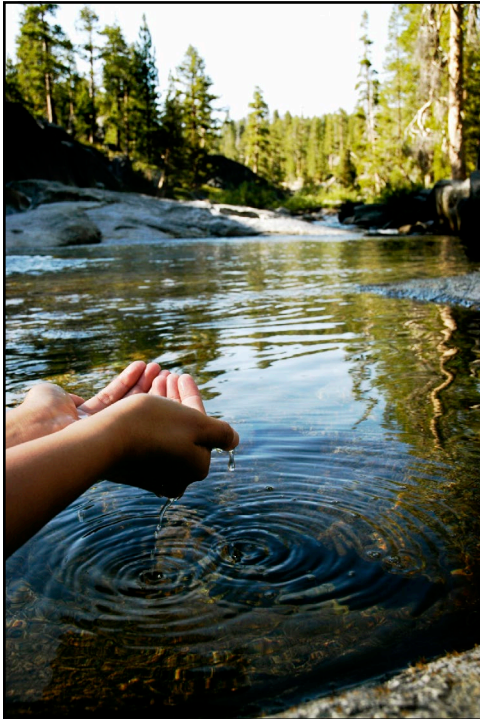
Ken Salazar, U.S. Secretary of the Interior (2012)



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Human Dimensions

“The term human dimensions refers to how and why humans value natural resources, how humans want resources managed, and how humans affect or are affected by natural resources management decisions.

Human dimensions inquiries strive to understand human traits and how to incorporate that understanding into management planning and actions.

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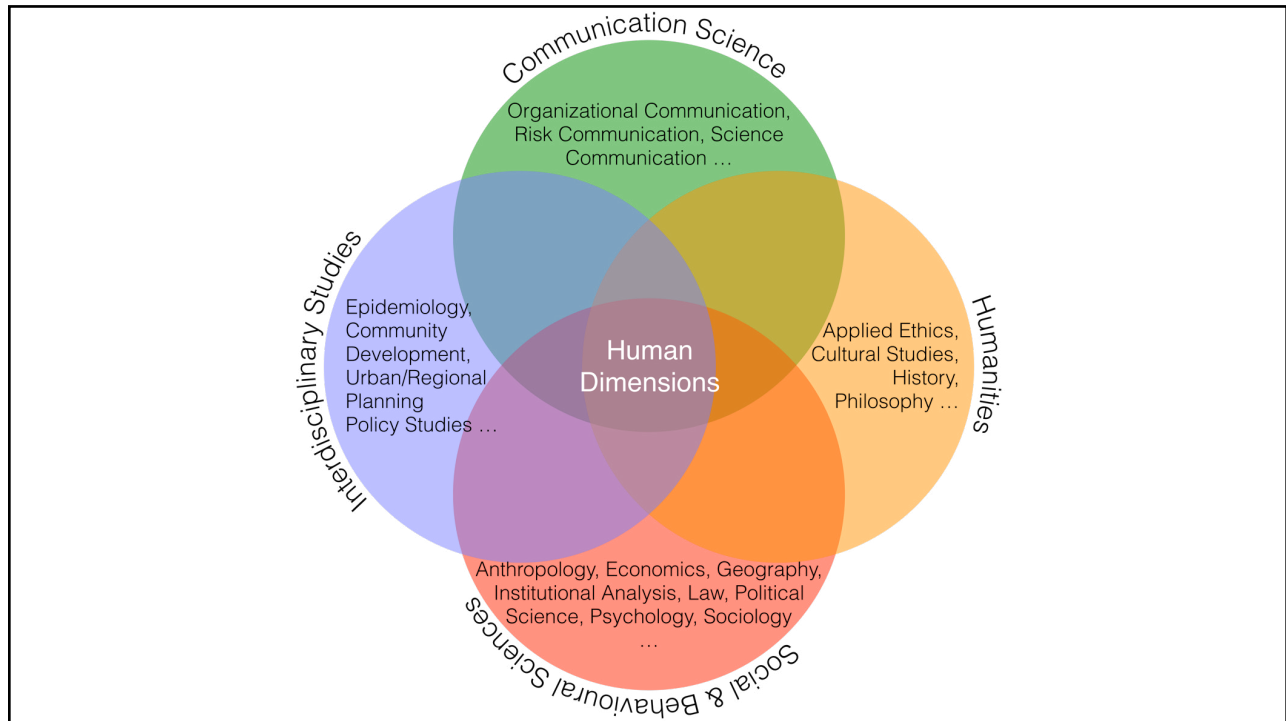
Human Dimensions (cont'd)

It covers a variety of ideas and practices including cultural, social, and economic values; individual and social behavior; demographics; legal and institutional frameworks of management; communication and education; and, decision-making processes of management.”

(Decker, Brown & Siemer, 2001)



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The Human Dimensions Approach:

1. How and why do people value wildlife?
2. How do people want wildlife to be managed?
3. How do people affect, and how are they affected by, wildlife and wildlife management decisions?
4. How to best incorporate people's preferences into wildlife management and planning?

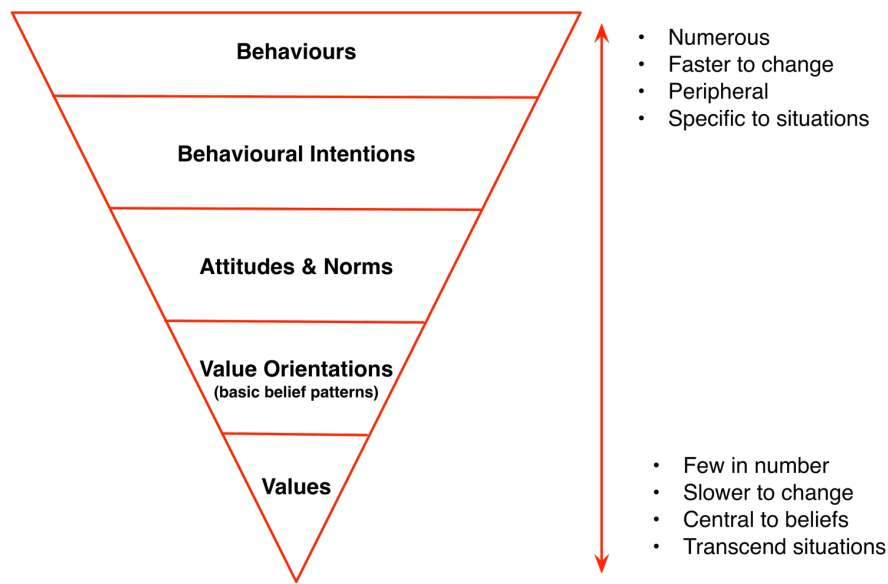
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Four Principles of Human Dimensions

1. Human and ecosystem interactions are natural and depend on one another.
2. Ecosystems are complex and managerially challenging.
3. The character and complexity of ecosystems vary by interacting temporal and spatial scales.
4. Sound responsible management is the key human role in ecosystem sustainability.

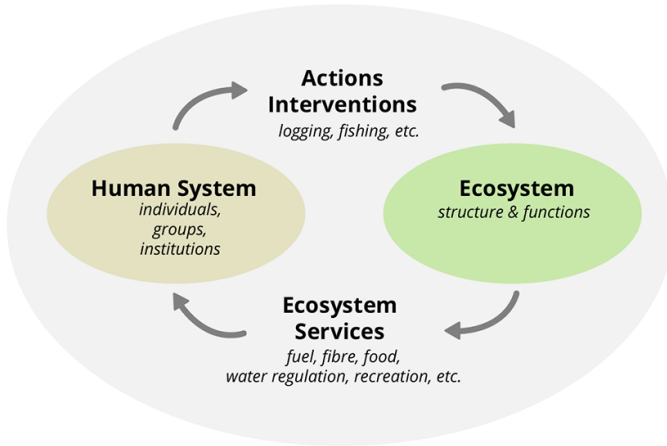
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Cognitive Hierarchy



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Social-Ecological Systems



- ❖ To date, most research about invasive species has focused on ecological aspects.
- ❖ Issues associated with invasive species, as in most environmental change and management issues, are embedded within a suite of social-ecological systems.
- ❖ People and society are fundamentally involved with biological invasions in multiple ways, from initial introduction, to recognition and management

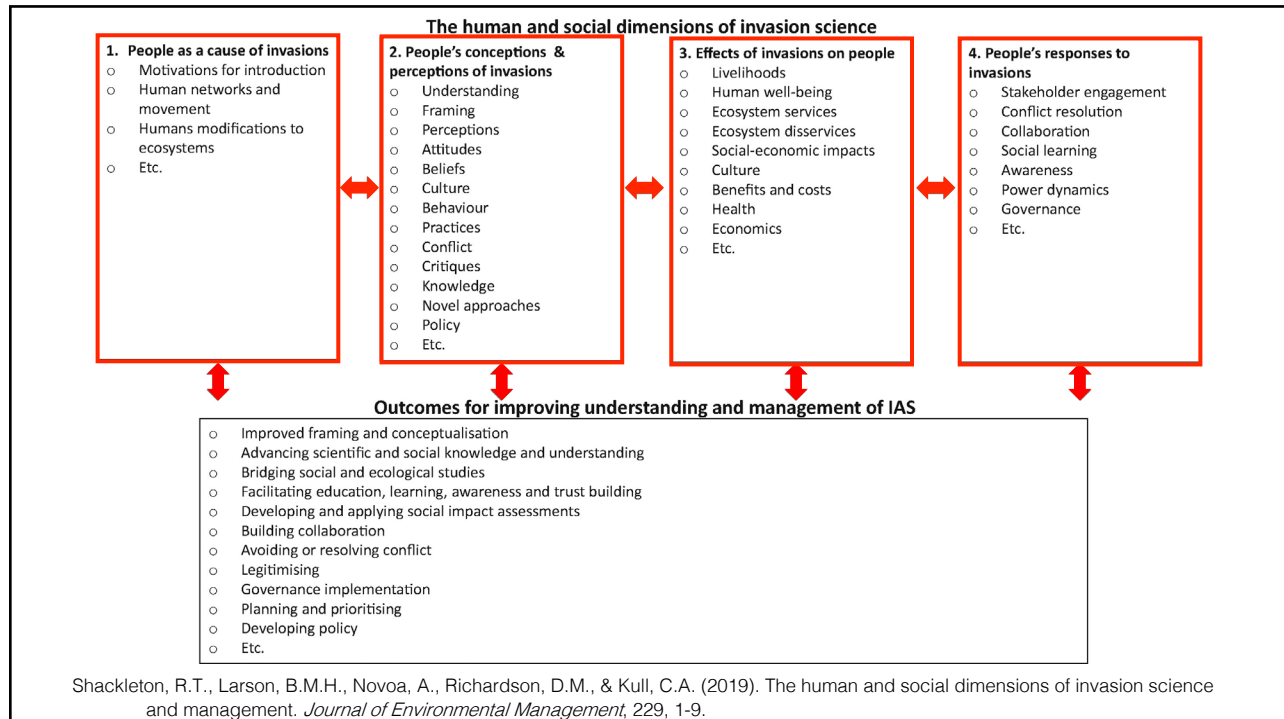
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Invasive Alien Species

- ❖ Early human dimensions invasive species studies have mostly focused on people as catalysts, drivers and vectors for the deliberate or accidental introduction and spread of non-native/alien species into new areas.
- ❖ People influence the susceptibility of ecosystems by modifying disturbance regimes and altering landscapes and the environment...
 - Invasive species affect people and society by influencing livelihoods and people's well-being.




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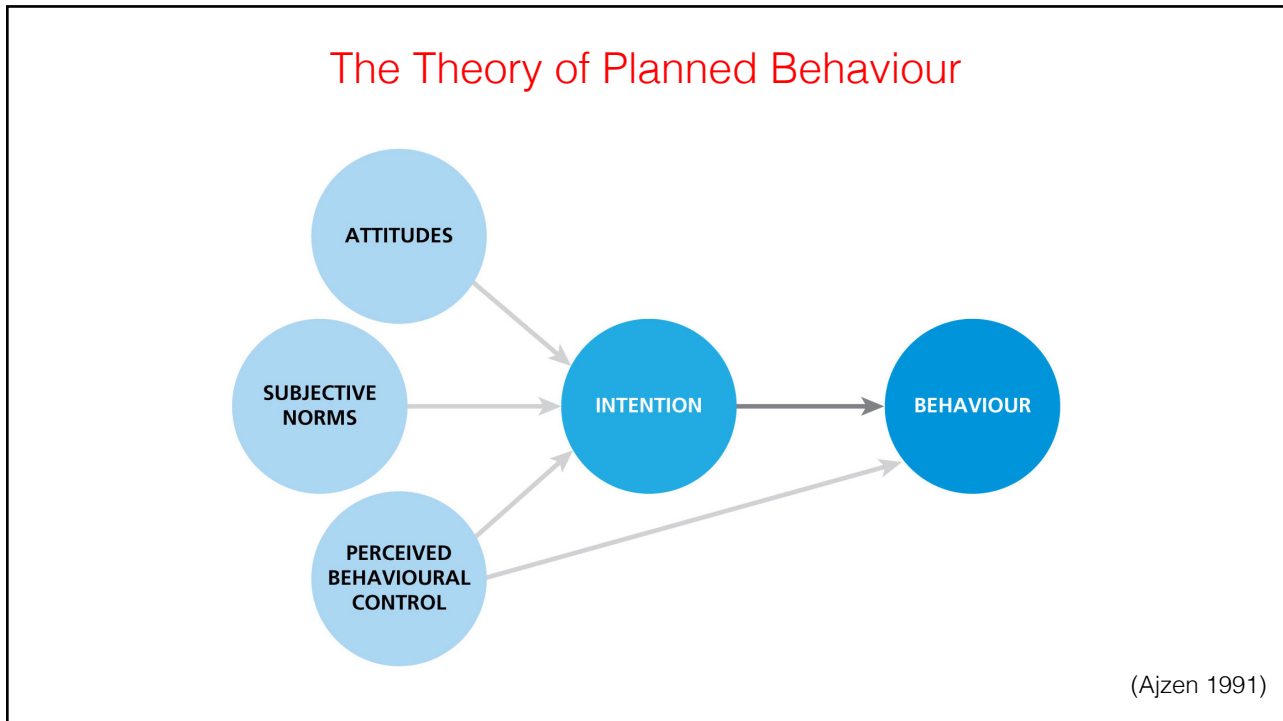
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Improving our Understanding of the Contexts & Complexity of Invasive Species and their Management

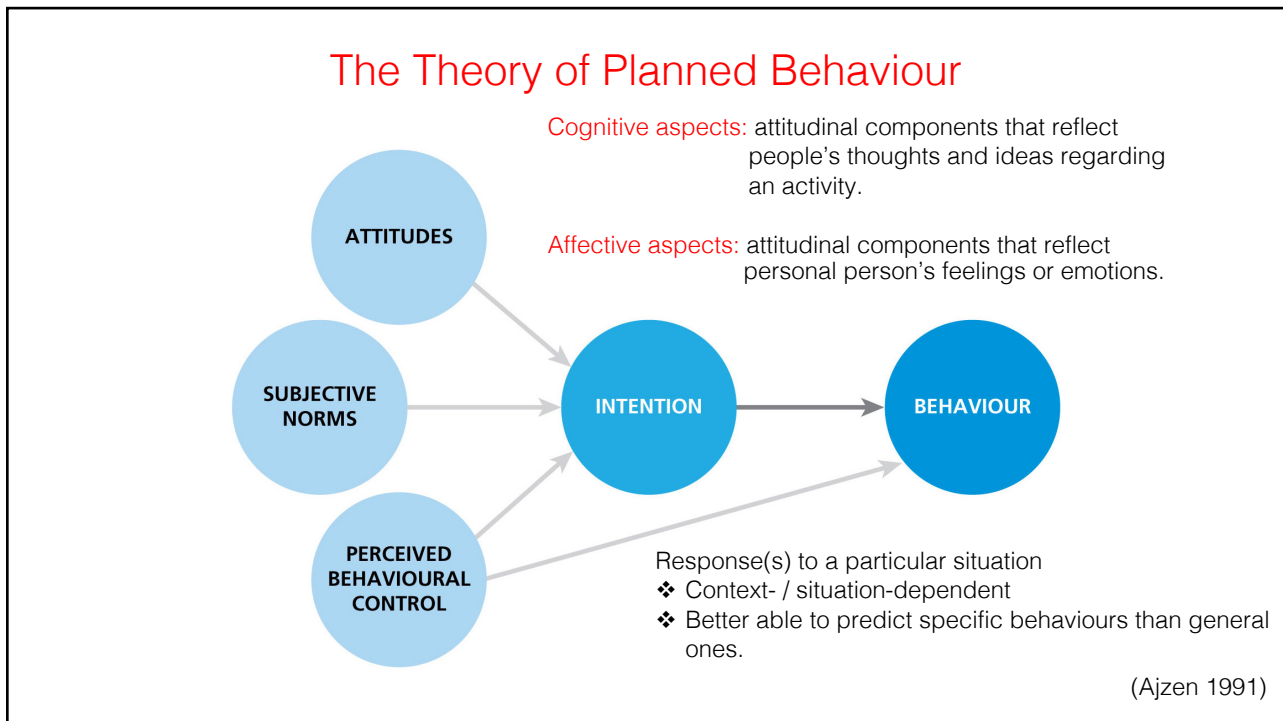


- ❖ Socio-economic benefits & costs of invasive species
 - Trade-offs, conflicts
 - Different human values, perceptions, and behaviours
- ❖ Framing invasive species issues...
 - Connect to the different motivations that people have.
 - How do people think and feel about invasive species?

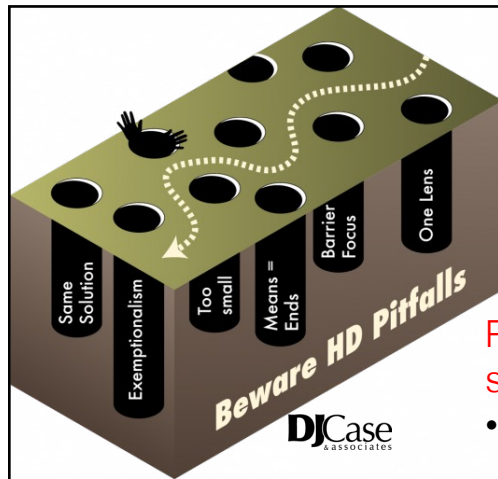
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Pitfall: Expecting definitive answers from social science.

- Social science is a process.

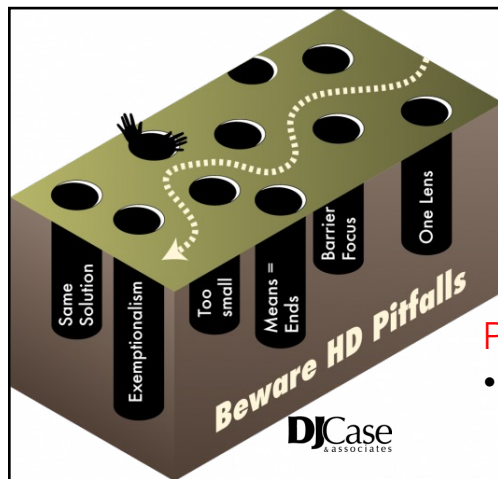
Pitfall: Making the means the ends.

- Make the ends the ends.

Pitfall: Making problems too small.

- Be honest about the size of problems.

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Pitfall: Reaching for the same solution.

- Consider a range of interventions/ approaches.

Pitfall: Practicing Exemptionalism.

- Practice empathy.

Pitfall: Focusing on Barriers.

- Focus on facilitators.

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Final Thoughts...

- ❖ Eliciting public attitudes & preferences takes time. So does incorporating them into plans and management actions.
- ❖ Changing people's behaviors is not easy... it will require persistence and dedication.
- ❖ Social license is important. But like any relationship, public engagement requires commitment. Engagement raises expectations.
- ❖ Public values & attitudes may not be what you expect.



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