Pulling together all resources for endangered species management: tapping social capital

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Aransas Wood-Buffalo Population of Whooping Cranes, *Grus americana*
Objectives

1. Analyze existing social capital in the community.

2. Evaluate social capital as a resource for community involvement in whooping crane management.
Social Capital

Social capital is the relationally grounded resource available to individuals or groups that facilitates reciprocity, creativity, knowledge sharing, and trust to their ability to solve problems.

Benefits of social capital in natural resource management:

1. Overcomes the exclusion problem (users’ access to or exclusion from resources) and the subtractability problem (each user is capable of subtracting from the welfare of all others) by imposing norms that inhibit outstanding behaviors.

2. Reduces transaction costs and opportunistic behaviors and guarantee the enforcement of collective actions by imposing costs on aberrant behaviors.

3. Reinforces compliance through accumulative generalized trust built through social bonds.
## Social Capital

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<tr>
<th>Social Capital Dimensions</th>
<th>Indicator</th>
<th>Description</th>
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<tr>
<td>Structural</td>
<td>Networks</td>
<td>Groups formed through social interactions and relationships</td>
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<td></td>
<td>Institutions</td>
<td>Organized or established groups</td>
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<td></td>
<td>Engagement</td>
<td>Individual or collective actions to address specific issues</td>
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<td>Common rules, norms, and sanctions</td>
<td>Social constructs that have evolved through ongoing network relations</td>
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<td>Cognitive</td>
<td>Shared values</td>
<td>Commonly held ideas of what is worthwhile or important, and the basis for ethical behavior</td>
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<td>Exchange of goods and knowledge for mutual benefit, or continuing relations over time</td>
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<td>A belief that someone or something is reliable, good, honest, effective, etc.</td>
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METHODOLOGY

Semi-structured interviews of 35 individuals: 12 female, 23 male

25 AWBP community members who live and/or work in the AWBP wintering grounds, including:
- representatives of environmental non-profit organizations (NGOs)
- members of local civic and conservation groups
- private landowners or managers
- business representatives (tourism, real-estate, construction, Chambers of Commerce, industry)
- government representatives (local and state)
- natural resource managers (local, state, and federal)
- teachers, academics, fishers, birders
- and involved citizens.

Qualitative analysis using NVivo 10 software. (QSR International ®)
Social Network Dimensions

Bonding (within group) ties:

- Create of common knowledge
- Facilitate trust, reciprocity, and shared values
- Dark side: can be exclusionary

Bonding ties/total ties = 63%
Bridging ties/total ties = 37%
Bridging ties between community groups and non-community groups
Engagement: individual or collective action

As leaders in formal groups and institutions: 13 of 25 in leadership roles (in part due to purposive sampling)

As volunteers in organizations working on building birding trails or observation kiosks, routing kayak trails, beach clean-ups, protecting unique trees, and participating in sound wastewater management plans.

“So, I have never lived in a community that has had so much volunteerism and so much support for volunteerism.”

As political activists involved in a community driven lawsuit based on protecting whooping cranes under the ESA requiring state regulatory agencies to maintain adequate freshwater flows to the estuarine ecosystem (The Aransas Project vs. Shaw, et al. 2011).
Common Rules, Norms, and Sanctions

- Supplemental feeding
- Sustainable development
Cognitive Social Capital Dimensions

Shared values
Commonly held ideas of what is worthwhile or important, and the basis for ethical behavior

Attitudes and norms of behavior
Way of thinking about something or someone, standard pattern of conduct

Reciprocity
Exchange of goods and knowledge for mutual benefit, or continuing relations over time

Trust
A belief that someone or something is reliable, good, honest, effective, etc.
Shared Values and Attitudes and Norms of Behavior

Rich arsenal of shared values and norms of behavior that directly relate to whooping crane conservation:

- Cranes are valued aesthetically and economically
- Systems perspective towards whooping crane conservation, connectedness
  - Stewardship obligation, willingness to preserve
- Change happens through education
- Shared perceptions of threats: habitat loss, freshwater inflows, development
- Work well together
Reciprocity and Trust

Reciprocity is built through exchange of goods and knowledge and ongoing relations, and leads to...

Trust within the community.

Trust that decisions will be in the community’s interest.

“I’m furious at times that they don’t do more (Amelia)”

“I want them to not just accept everything, to look at it and go ‘that’s not right’ and to know that [shoreline dredging] shouldn’t be happening (Liam)”
Social capital provides a realistic baseline for community involvement in whooping crane management

• Structural dimensions: networks, engagement, leadership, and norms are established

• Cognitive dimensions support positive action: shared values about conservation, reciprocity and trust

• Challenges: building greater trust through collaborative efforts involving federal managers and the community

Photo by Renee Harbour and Harriet Holland
“I think local communities are important if we’re to be successful in the long term.”
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