Seasonality and visitors’ sense of place at Yellowstone National Park

Matthew T.J. Brownlee ¹
Kelly S. Bricker ¹

¹Department of Parks, Recreation, and Tourism at the University of Utah
Salt Lake City, Utah, USA

ISSRM 2014
Presentation

- Purpose and background
- Sense of place
- Study site
- Methods
- Results
- Implications and future research
Purpose and Background

• To understand how the specific elements of the winter experience in a national park contribute to visitors’ sense of place

• Multi-institution and international collaboration
Sense of Place

- ‘Physical space’ becomes ‘place’ when individuals attach meaning to a particular geographic location (Tuan, 1974)
- Beliefs and cognitions that reflect value and significance of the setting (Stedman, 2002)
- Can inform management by ensuring that diverse meanings are considered (Wynveen et al., 2010)
Methods: Data Collection

• Mixed-methods approach (Creswell & Plano Clark, 2011)
• Semi-structured interviews with a modified Seidman approach (Seidman, 2013, p. 20)
• Questions guided by a human-environment relationship framework (Williams & Patterson, 1999)
• Purposive selection to capture diverse meanings (Creswell & Plano Clark, 2011)
• Photo voice approach; visitor employed photography (VEP; Stedman et al., 2004)
Methods: Data Analysis

• Semi-inductive process with an a-priori framework and emergent themes (Creswell & Plano Clark, 2011)

• Salient quotes and meanings from verbal explanation of photographs (Park, 1999)

• Independent and collaborative theme development (Patton, 1995; 1999)
Inherent aesthetic
Instrumental goal-directed
Cultural symbolic
Individual expressive

Place meanings
(Williams & Patterson, 1999)

Winter elements
(Brownlee & Bricker, 2013)

Climate considerations
Seasonal attributes
Recent weather

Tangible
Intangible

n = 22
M = 41 minutes
M = 11 photographs/video
Climate considerations

Seasonal attributes

Recent weather

Inherent aesthetic

Instrumental goal-directed

Cultural symbolic

Individual expressive

Dispersion of quotes
<table>
<thead>
<tr>
<th>Inherent aesthetic</th>
<th>Instrumental goal-directed</th>
<th>Cultural symbolic</th>
<th>Individual expressive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in weather</td>
<td>Opportunity to use specialized equipment</td>
<td>Weather as a constraint</td>
<td>-</td>
</tr>
<tr>
<td>Fresh snow on landscape features</td>
<td>Weather as a positive facilitator</td>
<td>-</td>
<td>Weather and emotions</td>
</tr>
<tr>
<td>Influence of wind on park resources</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Change in weather

“We spent most the day in what most people would consider dreary weather. It was snowing….it was pleasant but it was cold and it was grey. And then the sun came out and just lit up everything and totally changed scenery, just brightened everything up. And at this point it was still snowing and the sun was shining through the trees and all the snow coming down and it lit up every crystal and it looked like all this diamond dust hanging in the air. Oh my gosh it was so pretty.”
“...and then there was this blast of wind, with snow crystals lifting up. It felt so cleansing and freeing and it made me feel, it made me physically aware of the power of nature and myself and how exquisite it all is. I felt so happy! The weather can do that.”
<table>
<thead>
<tr>
<th>Seasonal attributes</th>
<th>Inherent aesthetic</th>
<th>Instrumental goal-directed</th>
<th>Cultural symbolic</th>
<th>Individual expressive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aesthetics of thermals</td>
<td>Unique thermal viewing</td>
<td>Social bonding</td>
<td>Oneness with Yellowstone in Winter</td>
</tr>
<tr>
<td></td>
<td>Ice uniquely influences resources</td>
<td>Unique wildlife viewing</td>
<td>Uniqueness of transportation</td>
<td>Winter in Yellowstone larger than self</td>
</tr>
<tr>
<td></td>
<td>Seasonal snow accumulation on landscape features</td>
<td>Winter conditions bring specific challenges and opportunities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Winter soundscapes</td>
<td>Winter park infrastructure and services allow for goal fulfillment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Winter solitude</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
“Being here in the summer you are aware there are thermal features, but you are not as aware of how many there are because snow you know melts on top of them and that’s pretty neat but then you realize when you are skiing all of sudden…Your impression of the thermal activity in the park is dramatically different in the winter. You see these vast areas that are not steaming or anything but they’re melted free and that’s pretty neat…so you wouldn’t even know that thermal activity was there if it wasn’t winter.”
Winter in Yellowstone is larger than self

“I love this place. This is the most special place in the lower 48 states. I think it, it’s, it’s the place where I come to find sanity. It’s the place where everything still makes sense in the world. And it’s a place that should be preserved as well as we can for generation after generation after generation.”
<table>
<thead>
<tr>
<th>Climate considerations</th>
<th>Inherent aesthetic</th>
<th>Instrumental goal-directed</th>
<th>Cultural symbolic</th>
<th>Individual expressive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Change to species</td>
<td>Influence on outdoor recreation</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
“The grizzly bears are changing their habits from eating more white park pine nuts to killing more elk calves….At the same time there is pressure on the elk because of the drought. The drought then changes the grasses and when things burn out it is often replaced with cheat grass. We see the elk population dropping. As the vegetation changes it can’t support the ungulates that the predators are going to need. It’s a cascade of events that are problematic and will influence all animals.”
Influence on outdoor recreation

“Climate change….uh less skiing days in terms of actual recreation. Worst skiing conditions in terms of a selfish recreational point of view. A lot of secondary impacts and impact on my experience.”
<table>
<thead>
<tr>
<th></th>
<th>Inherent/aesthetic</th>
<th>Instrumental/goal-directed</th>
<th>Cultural/symbolic</th>
<th>Individual/expressive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weather</strong></td>
<td>Change in weather</td>
<td>Opportunity to use specialized equipment</td>
<td></td>
<td>Weather and emotions</td>
</tr>
<tr>
<td></td>
<td>Fresh snow on landscape features</td>
<td>Weather as a constraint</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Influence of wind on park resources</td>
<td>Weather as a positive facilitator</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Seasonal attributes</strong></td>
<td>Aesthetics of thermals</td>
<td>Unique thermal viewing</td>
<td>Social bonding</td>
<td>Oneness with Yellowstone in Winter</td>
</tr>
<tr>
<td></td>
<td>Ice uniquely influences resources</td>
<td>Unique wildlife viewing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seasonal snow accumulation on landscape features</td>
<td>Winter conditions bring specific challenges and opportunities</td>
<td>Uniqueness of transportation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Winter soundscapes</td>
<td>Winter park infrastructure and services allow for goal fulfillment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Winter solitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Climate considerations</strong></td>
<td>Change to species</td>
<td>Influence on outdoor recreation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Climate considerations

Recent weather

Seasonal attributes

Number of quotes

- Inherent aesthetic: 28
- Instrumental goal-directed: 72
- Cultural symbolic: 14
- Individual expressive: 5

- Recent weather: 24
- Seasonal attributes: 32
- Climate considerations: 12
- Other: 7

Number of quotes
Future research and implications

- Comparison to other winter destinations and experiences
- Comparison to summer visitors at Yellowstone
- Explain quantitative results
- Information for management
Seasonality and visitors’ sense of place at Yellowstone National Park

Matthew T.J. Brownlee 1
Kelly S. Bricker 1

1Department of Parks, Recreation, and Tourism at the University of Utah
Salt Lake City, Utah, USA

matthew.brownlee@hsc.utah.edu