Trails and Their Communities: A case study of the Gandy Dancer Trail

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Situation:

- Regional Trail Planning Issues
- Motorized Users vs. Non-motorized users
- No evaluation of the trail master plan
Research objectives

1. Evaluate the recreation use compatibility and compares results to SCORP-Statewide Comprehensive Outdoor Recreational Plan 2005-2010.

2. Estimate user impacts of the Burnett/Polk County section of the Gandy Dancer Trail on both local economic characteristics and recreational use compatibility.

3. Develop useful local information:
   - Use and user characteristics (tourism marketing)
   - Importance-performance characteristics of locally available amenities
   - Economic impacts of trail use (development interests)
   - Locally available public services (local officials’ interest)
# State linear trails in Wisconsin – Allowable Uses

<table>
<thead>
<tr>
<th>Use</th>
<th>Metric</th>
<th>Total</th>
<th>Avg Miles Per Trail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strictly Nonmotorized</td>
<td>Number Mileage</td>
<td>5</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Nonmotorize &amp; open to ATV/Snowmobile</td>
<td>Number Mileage</td>
<td>10</td>
<td>41.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>411</td>
<td></td>
</tr>
<tr>
<td>Nonmotorize &amp; open to Snowmobile/partial or no ATV</td>
<td>Number Mileage</td>
<td>22</td>
<td>57.2 (Gandy Dancer 48 miles)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,259</td>
<td></td>
</tr>
<tr>
<td>Undecided and/or closed</td>
<td>Number Mileage</td>
<td>5</td>
<td>18.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Total –ALL Linear State Trails</td>
<td>Number Mileage</td>
<td>42</td>
<td>43.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,820</td>
<td></td>
</tr>
</tbody>
</table>
Applied research method

- Study design:
  - random intercept sample
  - follow up with mail survey
- Stratification:
  - by month (12-month time frame)
  - by day of the week
  - by location along the trail
- Intercept surveys
- Mail surveys
- Focus groups
User Demographics

Table xxx. Sample Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Intercept</th>
<th>Mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (yrs-mean)</td>
<td>48.7</td>
<td></td>
</tr>
<tr>
<td>Education (yrs in school-mean)</td>
<td>13.3</td>
<td></td>
</tr>
<tr>
<td>Annual Pre-tax HH Income (mean)</td>
<td>$78,970</td>
<td></td>
</tr>
<tr>
<td>Party Size (#-mean)</td>
<td>1.66</td>
<td></td>
</tr>
<tr>
<td>Frequency of Use (# per year-mean)</td>
<td>39.7</td>
<td></td>
</tr>
<tr>
<td>Total Sample Attempts</td>
<td>701</td>
<td>278</td>
</tr>
<tr>
<td>Null Samples</td>
<td>314</td>
<td>5</td>
</tr>
<tr>
<td>Number of Responses</td>
<td>278</td>
<td>212</td>
</tr>
<tr>
<td>Response Rate</td>
<td>71.8%</td>
<td>77.7%</td>
</tr>
</tbody>
</table>
Gandy-Dancer Trail Usage During Study Period

Approximately 28,000 parties annually or 46,480 users annually
Motivation for Trail Use

Significant Differences
(at the p < .10 level)

- Non-motorized mean
- Motorized mean

Motivating Factor
Trail Quality
Weather
Closeness to home
Quiet, rural atmosphere
Other recreation
Family & friends
Privacy & solitude
Natural features
Other

Level of Importance
Not Important
1
2
3
4
5
6
7
8
9
10
Very Important

Very Important

8
9
10
8
9
10
8
9
10
Very Important

Very Important
**Recreational Involvement**

Significant Differences
(at the p < .10 level)

- 🌟 Non-motorized mean
- 🌟 Motorized mean

<table>
<thead>
<tr>
<th>Recreational Activity</th>
<th>Non-motorized Mean</th>
<th>Motorized Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XC skiing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downhill skiing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ice Skating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fishing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horseback riding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stamping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATV riding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snowmobiling</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Very Involved

Not Involved
Compatibility Among Alternative Trail Uses

Significant Differences
(at the p < .10 level)

- Non-motorized mean
- Motorized mean

Other Types of Trail-based Recreational Use

- Bicycles
- ATVs
- Horses
- Hunters
- Hikers
Crowding Statements

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

The Gandy Dancer Trail has become too crowded.
I prefer to be alone (without other human encounters) while recreating on the Gandy Dancer.
Increased popularity of the Gandy Dancer Trail has compromised my enjoyment in use of the trail.
The people that I encounter while using the Gandy Dancer Trail do not generally bother me.
Responses To Increased Use

- Much Worse
- Somewhat Worse
- The Same
- Somewhat Better
- Much Better

- Twice as many bicyclists
- Twice as many hikers
- Twice as many motorized users
- Hunters near the trail
- Horses on the trail
Trail Services
IPA

(Importance Performance Analysis)

A  Trail Signage
B  Accessible Restrooms
C  Type of Trail Surface
D  Grooming of Trail Surface
E  Trail Safety (emergencies)
F  Enforcement of Trail Rules
G  Camping Facilities
H  RV Parks
I  Equipment Security Facilities
J  Picnic Areas
K  Cleanliness of Public Areas
L  Refreshment Stations
M  Drinking Fountains
N  Scenery
Tourism Services - IPA

(Importance Performance Analysis)

A  Fast Food Restaurants
B  Sit-Down Restaurants
C  Take-Out Restaurants
D  Hardware Stores
E  Hotels/Motels/B&B
F  Amusements
G  Handicrafts & Souvenirs
H  Local Arts & Theatre
I  Movie Theatres
J  Historical Sites
K  Wi Fi Locations
L  Bicycle Shops/Repair
M  Sporting Goods Stores
N  Interpretive Displays
O  Gambling
P  Festivals & Events
Community Services - IPA

(Importance Performance Analysis)
A Medical Facilities
B Law Enforcement
C Fire Protection
D Streets and Roads
E Bridges
F Cell Phone Connections
G Clean Drinking Water
H Libraries
I Public Schools
J Job Opportunities
K Local Officials
L Shopping Facilities
M Cost of Living
N Environmental Quality
O Public Health Services
P Dental Services
Q Housing
R Solid Waste Disposal
S Local Business Hours
T Hi-Speed Internet
Local Interactions

- I feel welcome in the local communities surrounding the Gandy Dancer Trail System.
- I feel my satisfaction as a consumer is deemed important to the local business owners that I have come in contact with in the communities surrounding the Gandy Dancer Trail System.
- I believe my views about recreational opportunities available on the Gandy Dancer Trail System are considered fairly by those who manage the trail.
- I don’t have a problem with the concept of user fees to pay for maintenance and improvements of the Gandy Dancer Trail system.
Average Individual Trip Spending

<table>
<thead>
<tr>
<th>Item:</th>
<th>Total</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groceries/Liquor</td>
<td>$21.08</td>
<td>$16.09</td>
</tr>
<tr>
<td>Restaurants/Drinks</td>
<td>$27.19</td>
<td>$19.90</td>
</tr>
<tr>
<td>Gas, Auto Service</td>
<td>$22.76</td>
<td>$14.99</td>
</tr>
<tr>
<td>Recreation (golf, amusements, etc.)</td>
<td>$3.68</td>
<td>$3.29</td>
</tr>
<tr>
<td>Recreational Equipment</td>
<td>$60.39</td>
<td>$57.03</td>
</tr>
<tr>
<td>Other Retail</td>
<td>$6.59</td>
<td>$3.77</td>
</tr>
<tr>
<td>Casinos/Gambling</td>
<td>$1.33</td>
<td>$1.32</td>
</tr>
<tr>
<td>Overnight Accommodations</td>
<td>$2.73</td>
<td>$1.14</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$145.74</strong></td>
<td><strong>$117.54</strong></td>
</tr>
</tbody>
</table>

Note: "Total" reflects spending regardless of place while "Local" reflects spending in Polk and Burnett Counties and is included within "Total"
Total Trip-related Spending by Gandy Dancer Trail Users
(during 12 month study period, October 2006 through September 2007)
## Total annualized Trip Spending on Recreational Items During Trip

<table>
<thead>
<tr>
<th>Item:</th>
<th>Total</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groceries/Liquor</td>
<td>$591,455</td>
<td>$451,679</td>
</tr>
<tr>
<td>Restaurants/Drinks</td>
<td>$763,193</td>
<td>$558,464</td>
</tr>
<tr>
<td>Gas, Auto Service</td>
<td>$638,618</td>
<td>$420,613</td>
</tr>
<tr>
<td>Recreation (golf, amusements, etc.)</td>
<td>$103,264</td>
<td>$92,256</td>
</tr>
<tr>
<td>Recreational Equipment</td>
<td>$1,694,711</td>
<td>$1,600,517</td>
</tr>
<tr>
<td>Other Retail</td>
<td>$185,005</td>
<td>$105,784</td>
</tr>
<tr>
<td>Casinos/Gambling</td>
<td>$37,367</td>
<td>$37,162</td>
</tr>
<tr>
<td>Overnight Accommodations</td>
<td>$76,491</td>
<td>$32,095</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$4,090,104</strong></td>
<td><strong>$3,298,570</strong></td>
</tr>
</tbody>
</table>
Total Equipment Spending by Gandy Dancer Trail Users
(during study period, October 2006 through September 2007)
Economic Impact

• Average user reported spending $117.54 at local businesses per trip
• $3.3 million annual economic impact (local)
• 100 jobs created
Conclusion

- Master plan is a key management tool in managing conflict and maximizing recreation use; it seems to be working well

- There are moderate economic impacts for the communities along the trail

- Opportunities exist to improve the trail

- Users value the trail and want to see increased use
So What/What If???

• New tourism kiosk in Centuria, WI
• Village of Luck Expanded Parking/Added Restrooms
• Two new start—up support businesses
• Village of Milltown added directional signage toward Mainstreet
• Polk County implementing user fee
• Polk County Tourism Council applies direct marketing efforts
• Polk County Tourism Council secures DOT signage along Interstate HWY 8