

UTAH RECREATION & TOURISM MATTERS



Institute for Outdoor Recreation and Tourism

August 2012

No. IORT/030

An Examination of the Implementation of Environmentally Sustainable Practices In the Utah Ski Industry: A Qualitative Study

Steven W. Burr and Andrew Call

Introduction

Utah is highly dependent on tourism visitation and the associated benefits of visitor spending and economic impact. In 2010/2011, visitor spending was estimated at \$6.5 billion, generating \$842 million in state and local tax revenues. A significant amount of visitor spending occurred at Utah's 14 ski resorts that hosted 3.8 million skier days in 2010/2011. The implementation of environmentally sustainable practices in the ski industry in the U.S. has become an issue of increasing attention and concern, and this is also true in Utah. Because of the potential impacts of climate change and unsustainable practices that negatively impact both the biophysical and human/cultural aspects of the environment, the ski resort industry is facing an uncertain future (Breiling et al., 1997; Elsasser & Burki, 2002; Fukushima et al., 2002; Hennessey et al., 2003; Scott et al., 2006). Good environmental practices are not only important in daily operations of ski resorts, but also are of importance to other local community businesses and stakeholders who depend on a consistent influx of tourism dollars to remain economically viable.

Utah's ski resort areas vary in the level of implementation of environmentally sustainable practices. In addition, there is variation in reporting specific environmental practices and initiatives, and the use of these for marketing purposes. Although there is variation among ski resort visitors as to the importance they place on the implementation of environmental practices at ski resorts, there is also a lack of knowledge and

understanding among local business owners, community members, and other stakeholders with regards to what current environmental efforts are being undertaken by ski resort areas, as well as plans for the future.

This qualitative research study was designed to examine the current level of implementation of environmentally sustainable practices at Utah's ski resort areas and also ascertain future plans. The hope is to generate a more in-depth understanding of what each resort is doing to address this issue, and also create baseline information on the environmental practices as a whole among Utah's ski resorts.

Specifically, this research project was designed to:

1. Determine the current level of knowledge, awareness, and implementation of environmentally sustainable practices at Utah ski resort areas.
2. Determine Utah ski resorts' future plans for the implementation of environmentally sustainable practices, including the motivations for such implementation.
3. Disseminate research findings to Utah ski resort industry and other stakeholder interest groups.

Collecting this baseline information is important to help ensure the sustainability of the Utah ski resort industry as a whole, and will hopefully be beneficial in helping to create new strategies and plans on how to properly address this issue in the future.

Methods

Fifteen in-depth key informant interviews were conducted from Fall 2011 through Spring 2012, with ski resort employees at 11 of the 14 ski resorts in the state (three resorts did not participate in the study). These employees were identified as knowledgeable and influential individuals regarding environmental sustainability within the resort area in which they were employed, and held a variety of positions, and varied in

their years of residence in Utah and their educational level (Table 1).

All of these key informants were well-versed in the topic of environmental sustainability, possessed a well-rounded understanding of different approaches and strategies their ski resort was implementing, and were knowledgeable about current and future plans.

Table 1—Key Informants' Position, Years of Utah Residence, and Education Level

Resort	Positon	Years in Utah	Education
A	Sustainability Coordinator	4 years	B.S. Ecology
B	Mountain Operations Manager	Entire Life	Some College
C	Resort Sustainability/Mountain Dispatch Manager	17 years	B.S.
D	Executive Assistant and General Manager	20 years	B.S. Marketing
D	Director of Marketing	33 years	Some College
D	Resort Maintenance Manager	Entire Life	Some College
E	CEO and Co-Owner	2 years	B.S. Economics
F	Director of Operations and Environmental Affairs	Entire Life	Some College
G	Energy Conservation Coordinator	16 years	Some College
G	Vice-President of Resort Operations	Entire Life	B.S. Journalism
G	Budget Director	20 years	B.S. Accounting
H	Public Relations and Marketing Manager	10 years	B.S. Marketing
I	Director of Marketing and Public Relations	8 years	B.S. Marketing
J	General Manager	Entire Life	B.S.
K	Guest Services and Green Team Manager	30 years	B.S.



Summary Results

In response to the question, Does your resort currently engage in environmentally sustainable practices and if so, what kind of practices?, all key informants mentioned some type of practice (Table 2), with recycling the most frequently mentioned response (n=10) and also typically the first environmental practice key discussed. This involved a variety of recycling efforts including consumer waste, metal and building material, and oil and chemical recycling. The second most mentioned response centered on energy savings, carbon reduction, and energy credits (n =9) specifically through Rocky Mountain Power’s Blue Sky Program. The third most mentioned sustainable practice was water conservation and water quality improvement (n=6). The larger ski resort areas stressed their use of high efficiency snowmaking machines in order to better conserve energy and water use, and also to expand their winter season by being able to open at an earlier date. This was also seen as a water storage technique. One key informant stated:

Snowmaking is probably the biggest user of water here. We like to see that as a recycling effort because what you make as snow comes back as groundwater. It also helps out in that we use it in the winter and it comes down later in the summer. We look at that as helping rather than hurting. There is some evaporation and all that, but we consider snowmaking as putting it right back in.

When asked whether effort and attention toward implementing environmentally friendly practices had increased, decreased, or remained the same, nearly every key informant reported their resort was increasing effort and attention towards continuing and implementing more environmentally sustainable practices (n=13). Some mentioned environmental efforts had largely increased due to a more cohesive understanding among all employees in different departments in their ski resort

about this issue. They felt awareness and education in the importance of environmentally sustainable practices had increased and more employees were “on the same page.” Overall, the large majority (86%) of Utah ski resort areas are in some way increasing the effort and attention put towards environmentally sustainable practices.

When asked, Do you feel enacting environmentally sustainable practices at ski resort areas has become an issue of mounting concern?, many key informants asked for additional clarification. This was offered by asking where environmentally sustainable practices fit into the resort’s business model, where these practices ranked regarding level of concern in daily operations. Respondents trended toward viewing the environmental practices within their ski resort area as a high (n=7; 46%) or medium (n=5; 33%) concern. Reasons for considering these environmental practices of high to medium concern seemed to center around two key themes. First, key informants highlighted such practices as an integral part of their business plan, day-to-day operations, and future planning initiatives. Related to this, one key informant stated:

It depends on how you define sustainability. We define it as a balance between our environment, economy, and social dynamic. When you look at that, we want to be here as long as possible and you realize that very much has to do with sustainability. We are a fairly sustainable business, so it is offering a new management skill because things are changing in the market and no matter what thinking this way is a tool to really help out.

Second, key informants mentioned environmentally sustainable ski resort area practices as integral to ensuring they remain economically viable into the future, and also felt a responsibility to do so as “environmental stewards.”

Table 2—General Environmental Practices of Utah Ski Resort Areas*

Recycling	Energy Conservation	Water Conservation/ Water Quality Improvement	Transportation	Tree Planting/ Fuel Reduction	Digital/Paper Waste Reduction
n=10 (66%)	n=9 (60%)	n=6 (40%)	n=3 (20%)	n=4 (26%)	n=2 (13%)

*n = number of key informants identifying environmental practice; multiple responses allowed for each key informant.

I think it is because we are providing an outdoor or environmental experience, so to not be good stewards of that, or take care of it, or invest in the environment just seems kind of irresponsible.

Those respondents expressing low concern (n=3; 20%) highlighted a single central theme. They related environmentally sustainable practices to the concern their visitors would place on the issue, and felt this was of low concern in their visitors' eyes. These key informants placed high importance on visitation numbers and revenue, and a lower priority on environmental practices as related to visitor perception.

Overall, key informants all appeared environmentally aware and concerned about their resort's sustainable practices, but they differed on how this related to resort operations, as either part of their business model, the need to be environmentally friendly, or based on visitor perception of the issue.

When asked what the biggest limitation to adopting more environmentally sustainable practices was at their ski resort, the most frequent response was "monetary limitations" (n=14), and this was usually the first limitation mentioned (Table 3). Other responses ranged from lack of internal organization, lack of proper education on environmental practices for employees and visitors, and the lackluster state of the U.S. economy.

Future Plans for the Implementation of Environmentally Sustainable Practices

Key informants were asked, Can you describe any projects your resort is currently working on that focus on environmental sustainability? Responses to this question were quite varied. Respondents from the larger ski resort areas in Utah described implementing

large-scale projects such as converting their resort area to wind energy, hydroelectric, or geothermal power (n=4; 26%). Respondents from smaller resort areas mentioned their day-to-day improvements in environmental practices (n=5; 33%). This included increasing recycling efforts, reusing materials whenever possible, upgrading to more energy-efficient lighting, and decreasing snowmaking when possible. Respondents from both large and small resort areas remarked on the continuous monetary challenge involved with taking on future projects focused on environmental sustainability. Budgeting priorities are often put elsewhere with projects of an environmental nature receiving less priority. However, regardless of resort size or budget, all key informants stated their resort area was working towards either enacting new environmental practices or improving upon existing ones.

To further understand how other stakeholders and entities play a role related in the sustainable environmental practices at ski resorts, key respondents were asked, Do you involve other community members/local businesses, stakeholders, or interest groups in your planning process? All key informants stated they did so (n=15; 100%). This is an example of ski resort companies, their employees, and local community members or businesses being vested in environmentally sustainable practices of their local ski resort area in order to ensure it continues to keep the community economically viable into the future (Proebstl, 2006).

In response to a related question, Do you see this as an effective way to address the issue of environmental sustainability amongst ski resorts in Utah?, all key informant (n=15; 100%) regarded such efforts as effective and important, indicating a desire for ski resorts

Table 3—Perceived Limitations of Adopting Environmentally Sustainable Practices

Limitation	Number of Mentions
Monetary/Financial Challenges	14
Internal Challenges/Lack of Education Amongst Employees	4
Lack of Staff Time to Focus on Issue	3
Current State of the U.S. Economy	3
Communicating to Local Community the Importance Economically	1
Lack of Municipal Community Support	1
Decisions Revolve Primarily Around Guests	1
Uncertainty of Environmental Certification Programs	1

to continue working collectively in the future with local community members and stakeholder organizations. This may bode well for more collaborative planning efforts related to the implementation of environmentally sustainable practices in the future.

A final question for key informants was, Where do you see your ski resort area in 10 years in regards to environmentally sustainable practices? As expected, key informants stated environmental efforts would continue to improve, and they expected more involvement from the local community and its stakeholders. Again, the trend continued for ski resort areas to mainly pursue improvement of their day-to-day environmental practices, rather than the implementation of more large-scale practices, again mainly due to perceived budgetary constraints. It appears that when Utah ski resort areas have the financial means to undertake a project focusing on environmental sustainability, they quickly take it on and spread the innovation throughout the multiple departments of their resort area. When monetary challenges exist, or other projects take precedence, implementing these practices will not occur.

To summarize, the key informants had a positive perception their resort area would increase environmentally sustainable practice into the future and showed support for continued involvement of local entities. According to informants' responses:

- All resort areas involved in the study plan to increase environmentally sustainable practices, when monetarily feasible.
- All resort areas involved in the study involve local community organizations and stakeholders in their environmental practice planning process.
- An interdisciplinary planning process is considered effective.
- Most Utah ski resort areas will work toward improving current environmental practices over the next 10 years, rather than taking on large-scale projects.



References

- Breiling, M., Charamza, P., & Skage, O. (1997). Climate sensibility of Austrian districts with particular concern of winter tourism related to the whole of Austria. *Institute for Landscape Planning Report*, 97:1, Austria.
- Elsasser, H., & Burki, R. (2002). Climate change as a threat to tourism in the Alps. *Climate Research*, 20, 253–257.
- Fukushima, T., Kureha, M., Ozaki, N., Fujimori, Y., & Harasawa, H. (2002). Influence of air temperature change on leisure industries. *Mitigation and Adaptation Strategies for Global Change*, 7, 173-189.
- Hennessey, K., Whetton, P., Smith, I., Bathols, J., Hutchinson, M., & Sharples, J. (2003). *The impact of climate change on snow conditions in mainland Australia*. Melbourne: Commonwealth Scientific and Industry Research Organisation, Atmospheric Research Division.
- Scott, D., McBoyle, G., Minogue, A., & Mills, B. (2006). Climate change and the sustainability of ski-based tourism in eastern North America: A reassessment. *Journal of Sustainable Tourism*, 14(4), 376-398.



Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions. Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities. This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Noelle E. Cockett, Vice President for Extension and Agriculture, Utah State University.