Hiking preparedness and knowledge of low impact behavior of day visitors to the backcountry

Park Planning and Policy Lab
University of Illinois
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Growing importance of day use hiking

- Increased SAR efforts of 1990s
- Perceived changes in day use beyond hikers on corridor trails (1990s to present)
- Access improved to some trailheads in 1990-2000s, effects on day use uncertain
- Facilities (mostly toilets) added to well-traveled trails 1995-2000, effects on day use uncertain
Objectives of presentation

- Provide assessment of day hiker preparedness
- Characterize day hikers’ knowledge of low impact behavior
Methods

• Data collection was May-October 2004 on representative sample of days and times

• Day hikers sampled on:
  • Bright Angel
  • South Kaibab
  • Grandview
  • Hermit
  • North Kaibab
  • Widforss
  • Ken Patrick
Where do day hikers get information?

54% Books or Magazines
37% Grand Canyon Website
17% Park Rangers
16% Friends/Word of Mouth
13% Ranger Programs
7% CVIP
Did information include safe hiking tips?

93% yes

Did information cause you to change plans?

18% yes
Most hikers well prepared

96% bring water
78% bring food
94% consider themselves fit
80% exercise at least every other day
85% reported being well-prepared
5% report being unprepared

Consider themselves not physically fit

Exercise ranged once every two weeks to less than once per month

Carried less water, less food

Reported hiking longer than they expected

More likely to hike on Bright Angel or Grandview trails
Most preferred management actions

58% rangers check supplies of day hikers
39% restrict start time on hot days
36% require orientation session of hikers
35% more trail signs about safety
21% restrict start time for summer months
13% limit number of day hikers by permit
10% eliminate SAR – make hikers responsible for their own health and safety
Knowledge about backcountry regulations

Results of true/false quiz about backcountry regulations:

86% correctly answered 9 of 11

“Pack-in, pack-out” not known well
What to do with food scraps and toilet paper?

7% reported true:

Food scraps (from snacks and lunches) should be scattered widely to avoid attracting and concentrating wild animals.

58% reported true:

When disposing of human wastes in places where toilets are not available, park rangers recommend that visitors bury their toilet paper.
Effect of low-impact hiking information on knowledge of toilet paper regulations

Received info: 46% correct

Did not receive info: 32% correct
### Most effective information sources

<table>
<thead>
<tr>
<th>Information Source</th>
<th>% correct on tp disposal</th>
<th>% who used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books and Magazines</td>
<td>51</td>
<td>55</td>
</tr>
<tr>
<td>Park Rangers</td>
<td>54</td>
<td>17</td>
</tr>
<tr>
<td>CVIP</td>
<td>71</td>
<td>7</td>
</tr>
</tbody>
</table>
Day hiker sensitivity to impacts

More sensitive to
litter, human waste, toilet paper, vandalism

Less sensitive to
mule waste, aircraft overhead, trail erosion
Important conditions for hiking experience

97% Considerate behavior other groups

59% Number of other people met

59% Availability of water

50% Number of rangers in the bc

44% Availability of toilets

40% Cleanliness of toilets
Developing recommendations to improve hiker preparedness

• PSAR efforts work for most day hikers -- Grandview visitors may be most at-risk

• Develop way to reach 5% who are unprepared for day hike

• If need for more control, “requiring supplies” and “restriction of start time” are most acceptable
Developing recommendations to improve low impact behavior

- Continue education efforts for low-impact hiking, with further access to CVIP
- Further emphasis on trail etiquette and “pack in, pack out” may be needed
- Develop objectives for each trail that recognize both overnight and day use