

A PILOT STUDY OF MODELING THE SNAKE RIVER FLOAT TRIP, GRAND TETON NATIONAL PARK

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Introduction

The objective of this pilot project was to develop a paradigm within which socioeconomic, landscape and service variables interact to produce the "floating experience". The specific objectives were:

1. Identify the desirable landscape elements of the Snake River corridor.
2. Develop time-distance floating model.
3. Identify components of the service and their possible effects on the floating experience.
4. Identify social factors and activity participation.

The methodologies employed were:

1. Unstructured, or nonstructured, interviewing was used to identify the social and service components of the paradigm. This is the proper approach when identifying components of problem, particularly in pilot studies.
2. Field observation, using observation schedules, was used to identify desirable elements of landscape (measurement of attention spans at designated points along the river) and to determine the degree of socialization among participants.
3. Direct measurement was employed in plotting the visual corridors and developing the time-distance relationships of the floating trips.

Summary of Results

A total of 38 days were spent in data collection. The first two weeks were spent in plotting the visual corridor, interviewing concessioners and National Park Service management personnel. The last five weeks were spent in interviewing and observing the visitor, observing the basic service elements, and summarizing past use from the private floaters (using Park Service registrations).

Fifty before and after interviews were considered sufficient for the pilot study, assuming a maximum variation in population (Barnes and Noble, 1963).

Only 43 before and after interviews were obtained because of some technical problems in meeting the visitor.

Perception and Motivation of Visitor:

In terms of perception and motivation, sequential analysis (in a deductive sense not inferential) is important in understanding the visitor--his expectation, style of participation and his reaction to the floating experience. Using ratios, 4 out of 5 visitors had never visited Grand Teton National Park; 5 out of 6 had never taken a float trip; and 9 out of 10 had never floated the Snake River in the Grand Teton National Park. This means that the visitor has no personal experience factors on which to base his expectations or to judge the quality of experience since he is doing this for the first time. He has little concept of the role of the National Park Service and the unique types of experience a natural area can provide.

In terms of personal decision-making, only 1 out of every 6 visitors came primarily to take the scenic float trip on the Snake River. Thus, it is important to understand why they took the trip (Table 1) and where did they find out about it (Table 2).

Table 1

Summary of Reasons for Taking the Float Trip

Basic Reason	Percentage of Respondents
Needed something to do	68%
Previous Experience	12%
Desire for Floating Experience (scenic viewing, photographs, etc.)	20%
N = 43	

Table 2

Source of Information Used in Personal Decision-making

Information Source	Percentage of Respondents
Concessioner Brochures	40%
A.A.A. Advertising	24%
N.P.S. Information	10%
Previous Experience	5%
Other	3%
N = 43	

Since people were inexperienced in river floating and did not come to the Park to float the Snake River, their perceptions and motivations of the

floating experience come primarily from advertising--the concessioner brochure, A.A.A. advertising, National Park information, and the interpretive programs during the float. There is direct relationships of what was pointed out in the brochure and what people expected to see (Table 3).

Table 3
Relationship of Primary Visitor Expectations and
Concessions Advertising
Primary Value of Trip

	Viewing Scenery ^a	Viewing Wildlife ^a	Other
Visitor Expectation	53%	47%	0
Pointed Out In Advertising	52%	48%	0
Actually Experienced	30%	63%	7% ^b

^aThese are summary categories

^bThe 7% refers to seeing man or man-made

Seeing man or man-made objects represented a negative element of the experience to few people (7%). Interestingly almost 90% of the respondents saw other floating groups on the river but did not consider them to be incongruent to the floating experience.

Table 3 also brings out another important factor in visitor perception--visitor expectation and actual experience may vary considerably yet the visitor has a very satisfying experience. In probing responses most visitors felt that aesthetics of viewing wildlife (beaver, moose, eagle, etc.) in their native habitats was the highlight of the trip, overriding such elements of the scenic grandeur of the Tetons. Everyone had seen the Tetons at various angles and environmental conditions along the road system within the Park prior to the float trip; yet, they had seen very little wildlife. Thus, the actual experience of viewing unique wildlife in a semi-wilderness state became the dominant value of the float trip. However, further probing indicated that the lack of scenic grandeur would have greatly diminished the satisfaction of the visitor.

Attitude scaling was done on the basic elements of the floating trip; these are presented in Table 4. These responses indicate that people felt the trip was satisfying the way it is presently operated. Again the perception of the individual appears to be molded by advertising since he is inexperienced in the area and in the activity of floating and is rarely sufficiently motivated to return for a second trip.

Table 4

Attitudes on the Floating Experience
(Question: In terms of your own personal enjoyment
would you prefer to have _____?)

Element of Floating Experience	Response
1. Size of Raft	Smaller (20%); Larger (5%); about the same (75%)
2. Spacing Between Rafts	Closer (10%); Further (20%); about the same (70%)
3. Viewing wildlife	More (55%); Same (45%)
4. Scenic viewing	More (15%); Same (85%)
5. Length of trip	Longer (5%); Shorter (25%); Same (70%)
6. Information during trip	More (20%); Less (10%); Same (70%)
7. Speed of the water	Faster (20%); Same (80%)
8. Level of development	More (45%); Same (50%)
9. Amount of visitor stops	More (30%); Less (20%); Same (50%)
10. Socialization among visitors	More (10%); Less (5%); Same (85%)

Ten checkpoints were selected and attention spans measured for the value of the elements of the landscape--an indicator of the intensity of the interest of the viewer. Also, attention spans for unscheduled observations (usually viewing wildlife) were measured. The following is a summary of these observations:

Table 5

Measurement of Visitor Attention Spans

Element	No. of Two-Minute Observation Periods	Average Length ^a of Attention Span
Wildlife	11	1:49
Distance Viewing actions ^b	36	0:51
Near Viewing ^c	12	0:29
Visitor Interaction	9	0:41

^a Attention span is the continuous attention given to an object, scene, or species of wildlife during the observation period.

^b Distant viewing primarily includes the panaramic view of the Teton Range

^c Near viewing is where the viewing is confined to the Snake River corridor because of steep canyon walls.

Visitor Socialization and Activity Participation:

Visitor Socialization

This does not appear to be important in terms of amount of time spent in group interaction (Table 5) and in terms of perceived emphasis (Table 4). However, it is an important aspect of the experience through the group educative process--a person who knew something about a particular object, scene, species of wildlife, etc. informed the others in his "group" (as defined in the discussion in Table 7). Of the 9 observations on visitor interaction, only one of these was with a person other than the group of people the individual came with.

Activity Participation

The activity participation was limited to passive forms of recreation (Table 6).

Table 6
Activity Participation

Activity	Percent Response
Scenic viewing	60%
Photography	15%
Visitor Interaction	10%
Lunch stops	10%
Relaxation	5%
Fishing	5%

N = 43

Background of Visitor:

Characteristic of Individual

The individual floater is described below:

Table 7

The Characteristics of the Individual Floater (Respondents)

Characteristic	Description
Sex	Males (65%); Females (35%)
Age	14-21 (16%); 22-34 (47%); 35-54 (29%); 55+ (8%)
Residence	Urban (20%); Suburban (60%); Rural (20%)
Childhood Residence	Urban (20%); Suburban (40%); Rural (40%)
Income	Above average (35%); average (65%)

Even with these limited data, the background of the floater does not appear to differ from the other park visitors. His concerns appear to focus on the developed programs rather than self-initiated activity.

Group Characteristics

The characteristics of the group are as follows:

Table 8

Group Characteristics of Snake River Floaters

Characteristic	Description
Party Size	1-3 people (27%); 4-10 people (40%); 11-15 people (5%); more than 15 (28%)
Party Composition	Single (2%); Family (72%); Friends (26%)
State of Residence	Calif. (22%); Colo. (12%); Wyo. (11%); Michigan (7%); Ill. (6%); others (42%)

The respondents indicated their party size based on the number of personal companions, rather than the number of people on the raft. This indicates a degree of territorialism even on the raft itself. (See section on social interaction)

Visual Corridor and Time/Distance Relationships:

These have been analyzed and will be presented graphically; however, they are still in the drafting stage.

Summary of Perceived Service and Management Problems:

These data are in the process of being summarized.

Profile of Private Floater:

Not included as part of the original contract. The need for this type of information arose during the study. In order to properly conduct the second part of the study improved registration procedures for the private floater must be developed.

Tentative Conclusions

It would be speculative at this point to interpret the entire study since some of the data has not been reduced. The conclusions will focus on the importance of the variables in the theoretical model (Figure 1). However, there are three research efforts that must be developed.

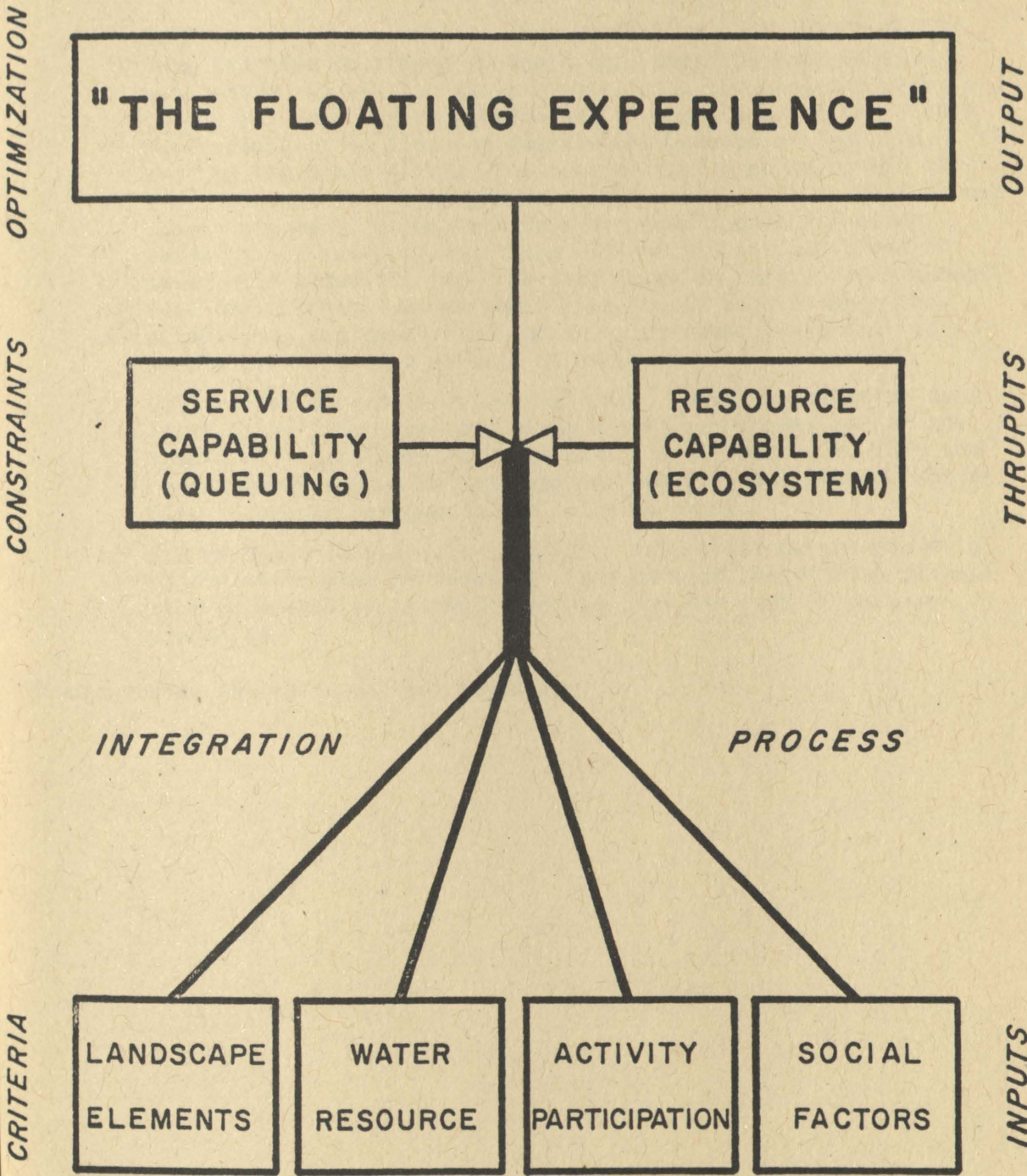


Figure 1. Conceptual Systems Model Describing the Floating Experience

1. Baseline data on perception and motivation. If this type of data had been developed 10 years ago, then the Park Service would have a basis for decision-making on carrying capacity. People may have enjoyed themselves 10 years ago but since then have sought other floating experiences because of crowding, etc. on the Snake River. The manager must then recognize that carrying capacity is a dynamic situation in which recreation use comes into equilibrium with existing conditions. In other words at any level of use there will be visitor satisfaction (even with crowding, resource deterioration, etc.). The manager must decide what type of experience should be provided; this establishes the upper limit of carrying capacity (number of people per unit area or unit of time).
2. Calibration of registration stations. Since the baseline data in No. 1 will be developed using a mail questionnaire and the sample will come from registrations, it is imperative that the registration system be improved and properly calibrated. Benefits to proper management will also be shown.
3. Standardized interpretive program. This will be the emphasis of the third year of research since much of the visitor perception is molded by the boat operator and the type of program presented.

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