

EXAMINING SPECIALIZATION FOR A FISHING SUBACTIVITY: IS ACTIVITY AND PLACE SPECIALIZATION BETTER UNDERSTOOD AT THE ACTIVITY OR SUBACTIVITY LEVEL?

Aurora Moldovanyi, M.S.
Recreation, Parks, & Tourism Resources
West Virginia University
Morgantown, WV 26506
redrockaurora@hotmail.com

Chad Pierskalla, Ph.D.
Recreation, Parks, & Tourism Resources
West Virginia University
Morgantown, WV 26506
cpierska@wvu.edu

Michael Schuett, Ph.D.
Recreation, Parks, & Tourism Sciences
Texas A&M University
College Station, TX 77843
mschuett@tamu.edu

Abstract

Recreation specialization offers an approach to examining the heterogeneity of participants involved in an activity such as fishing. Bryan (1979) suggested that broader recreational activities (i.e. fishing) would have subactivities (i.e. pay pond fishing) that differ by degree and range of specialization. This 2002 West Virginia study is the first to examine specialization for the subactivity of pay pond fishing. The purpose of this study of pay pond anglers is to examine the effect of recreation exclusiveness (at two levels of specificity- pay pond fishing and fishing exclusiveness) on activity and place specialization. In this study, the level of exclusive involvement in pay pond fishing and fishing activities were regressed on activity and place specialization scores, and their effects were compared to better address a scale question: Is activity and place specialization better understood at the activity or subactivity level? Regression analysis indicated that pay pond fishing exclusiveness was a better predictor of place specialization ($\text{Beta}=.253$; $p=.001$). Both pay pond fishing and fishing exclusiveness had negative effects on activity specialization; whereas, pay pond fishing was the better predictor ($\text{Beta}=-.237$; $p=.001$). The results of our study suggest that specialization at the subactivity level is meaningful—both activity and place specialization are better understood at the subactivity level than the activity level. As a pay pond angler becomes more exclusive in the subactivity, they exhibit more place attachment and less activity specialization. Perhaps place attachment occurred as a result of exclusive participation in a subactivity. A closer

examination of pay pond anglers' meanings of place may help understand attachment to the focal setting and be used to address management for recruitment of new and repeat visitors.

1.0 Introduction

Recreation specialization offers an approach to examining the heterogeneity of participants involved in an activity such as fishing. Private pay pond fishing is a subactivity of fishing. It involves paying a fee for the privilege of fishing a private pond where fish populations are enhanced by stocking of fish (Cichara 1982).

The concept of recreation specialization indicates that participation in an activity progresses along a continuum from general interest and low involvement to specialized interest and high involvement, reflected by equipment and skills used in the sport and activity preferences (Bryan 1977). Bryan (1979) suggested that broader recreational activities (e.g., fishing) would have subactivities (e.g., pay pond fishing) that differ by degree and range of specialization. Several studies have examined recreation specialization for anglers within the larger activity of fishing, but this is the first to examine specialization for the subactivity of pay pond fishing.

2.0 Purpose

The purpose of this study of pay pond anglers is to examine the effect of recreation exclusiveness at two levels of specificity—activity (i.e., fishing) and subactivity (i.e., pay pond fishing)—on activity and place specialization.

3.0 Method

3.1 Study Area

This study was conducted at three West Virginia pay pond establishments- each representing different biophysical, social, and managerial setting characteristics. A description of each study site follows.

3.1.1 Family Fishing and Camping

Family Fishing and Camping (FFAC) is a large-scale pay fishing operation situated on 235 wooded acres near Grafton, WV. There are 10 ponds on site. Four ponds, between one acre and an acre and a half in size, are reserved for pay pond fishing. Stocked fish

species vary among the four ponds but together FFAC ponds provide anglers the opportunity to fish for trout, shovelhead and channel catfish, largemouth bass, bluegill, and carp. FFAC charges its adult customers \$5 per day to catch-and-release; children are free. During trout season, customers pay \$10 per day to catch-and-keep a limit of eight trout. From mid-April to mid-October, customers may pay \$10 to participate in weekend catfish tournaments (two rod limit). Weekend catfish tournaments are held every Saturday night and Fridays starting in June, with the top three finishers each night receiving a monetary prize. During the summer of 2002, one Friday night tournament in July was designated Lady's Night.

In addition to pay pond fishing, FFAC maintains hiking trails, primitive campsites, cabin rentals, and RV/trailer site rentals. FFAC is planning on expanding their operation in all areas. The owners are planning to add West Virginia farm-raised hybrid bluegill and hybrid striped bass to their list of stocked species. Three ponds will be developed for breeding fish and three will be reserved for stocking fish before they are released in one of four pay fishing ponds. A concession stand, an entrance booth and gate, additional restrooms, more camping and RV/trailer sites, and a racecar track are being considered, planned, or developed for the site.

3.1.2 Whispering Pines

Whispering Pines is located in Alum Creek, WV, outside of the capitol city, Charleston. Whispering Pines pay lake is situated on 64-acres at the mouth of a small valley. It is surrounded by pine trees, hence the name. It is open year-round and there is a restaurant and bait shop on site. Whispering Pines maintains one three-acre pond that is stocked with catfish, shovelhead, and brown trout. Anglers can choose to catch-and-keep or catch-and-release the fish they catch. Each person is allowed to use two rods at a time. Regardless of whether the angler keeps their 10 fish limit, they are charged \$10 Monday through Thursday, or \$12 Friday through Sunday. If the angler chooses to fish after he/she hooks their limit, they must pay the same fee again to fish for up to another 10 hooked fish. Additionally, anglers may participate in catfish tournaments if they are targeting catfish species.

3.1.3 Mill Run Farm

Located in Marlinton, WV, within close proximity of the Monongahela National Forest, Mill Run Farm

features four pay ponds, a restaurant, a tree nursery, and horse boarding stables on 30 acres. The pay ponds are stocked with three species of trout (i.e., brook, brown, and rainbow) and steelhead salmon. Pay pond fishing occurs between March and October. Anglers are charged a flat fee of \$8 to catch-and-release or a fee per pound to catch-and-keep. The catch-and-keep limit is based on the weight of a maximum of four fish. Unlike the other sites, Mill Run does not host fishing tournaments.

3.2 Data Collection

Data collection was administered according to Dillman's (2000) Tailored Design Method in order to optimize questionnaire response rate. To achieve high response rates, the procedure included five elements: (1) a respondent-friendly questionnaire; (2) up to three contacts with the questionnaire recipient; (3) inclusion of a (self-addressed) stamped return envelope (and pencil); (4) personalized correspondence; and (5) a token financial incentive sent with the survey request (Dillman, 2000). To test survey instruments for content validity, a pilot study was administered prior to the formal data collection period. Formal data collection was conducted over an eight-week period, from June 2002 to August 2002. Four sampling dates per week were selected at random and the three pay pond locations were visited during that time. Adults, 16-years or older, were randomly selected to participate. Only one adult per group was eligible to participate; the eligible participant was selected using a random numbers table. Those who agreed to participate were assured their responses would be confidential and their name would not be connected with the results of this study. On-site interviews were conducted and mail-back questionnaires were distributed to 337 randomly selected pay pond anglers. Of the 337 anglers who received questionnaires, 212 returned usable questionnaires, a response rate of 65%. After data collection, non-response error was examined by performing Pearson's Chi-square test on selected variables. The results indicated no statistical differences between respondents and non-respondents.

3.3 Data Analysis

An angler's measure of activity specialization was determined by combining standardized z scores for five variables that reflect commitment and involvement in fishing. The measure of place specialization was determined based on an average score of nine place attachment variables (Williams et al. 1992). For the larger

Table 1.—Results of two multiple linear regression models of specialization

	<i>N</i>	<i>Beta</i>	<i>Adj R</i> ²	<i>F</i>	<i>p</i>
Model 1—Activity specialization	194		0.058	6.981	0.001
Fishing exclusiveness		-0.061			0.402
Pay pond fishing exclusiveness		-0.237			0.001
Model 2—Place specialization	186		0.059	6.848	0.001
Fishing exclusiveness		0.036			0.493
Pay pond fishing exclusiveness		0.253			0.001

recreation activity, fishing exclusiveness was calculated as the total number of recreation activities participated in by respondents during the last 12 months multiplied by -1. That is, the higher the score, the more exclusive the respondent participates in fishing. Subactivity exclusiveness was measured as the percent of fishing days an angler spends pay pond fishing in relation to all days spent fishing. Multiple linear regression analysis was performed for two models— one for activity specialization and one for place specialization. The independent variables were activity and subactivity exclusiveness; the dependent variables were activity and place specialization scores. For these models, the effects of regression were compared to better address a scale question: Is activity and place specialization better understood at the activity or subactivity level?

4.0 Results

Regression analysis indicated that pay pond fishing exclusiveness was a better predictor of place specialization ($Beta=.253$; $p=.001$) (Table 1). Fishing exclusiveness had only a small positive effect ($Beta=.036$; $p=.493$). Both pay pond fishing and fishing exclusiveness had negative effects on activity specialization; whereas, pay pond fishing was the better predictor ($Beta=-.237$; $p=.001$). As a pay pond angler becomes more exclusive in the subactivity, they exhibit more place attachment and less activity specialization.

5.0 Discussion

Recreation specialization is a complex phenomenon and the results of this study, the comparison between the utility of specialization at the pay pond exclusiveness and fishing exclusiveness scales, suggested that specialization at the subactivity level is more meaningful. In the case

of pay pond anglers in West Virginia, both activity and place specialization are better understood at the subactivity level than the activity level. Perhaps place attachment occurred as a result of exclusive participation in a subactivity. A closer examination of pay pond anglers' meanings of place may help understand attachment to the focal setting and be used to address management for recruitment of new and repeat visitors. Our study suggests that fishing clubs or other exclusive memberships may be one way to enhance "sense of place" and encourage repeat business to pay pond lakes.

5.1 Theoretical Implications

Not all anglers, particularly those who fish at pay ponds, are willing to devote the time and energy to pursue the subactivity or activity to the full extent possible; those who are not fall on the low end of activity specialization. On the other hand, exclusive pay pond anglers are generally partial to a pay pond establishment and exhibit high place specialization. Future research should attempt to devise a measure of subactivity specialization for recreationists engaged in a subactivity of the larger recreation activity. Future research should attempt to devise a measure of subactivity specialization for recreationists engaged in a subactivity (e.g., canyoneering) within a broader recreation activity (e.g., rock climbing). This idea is challenging, as researchers will have to uncover the slight differences among measures of specialization for subactivities. For instance, since type of fishing equipment is similar for multiple fishing subactivities, it would be necessary for researchers to distinguish specialized (or non-specialized) gear for particular subactivities. Variables of measure must then be tailored for use in specialization indices to distinguish specialization for participants engaged in subactivities.

Understanding activity specialization of pay pond anglers between various fishing subactivities could be investigated to determine whether there is a progression of typical stages through which anglers are likely to progress between subactivities. Suggested research questions include: Is pay pond fishing a gateway to the larger fishing community? and; Does pay pond angling initiate anglers to graduate to more advanced subactivities after mastering skills acquired in the pay pond arena? Bryan's (2000) proposition that assumes participation in fishing closely follows a pattern similar to a career could be tested for pay pond anglers: Do participants move from low involvement and general recreation interests to high involvement and more specific interests?

Additional research of pay pond anglers could examine the seemingly diverse and complex meanings associated with various levels of place specialization. A study by Williams and Patterson (1999) provided a framework for studying four unique domains of place meanings. They determined place meanings associated with inherent/aesthetic, instrumental/goal oriented, cultural/symbolic, and individual/expressive. Certainly a closer examination of pay pond anglers' meanings of place may help understand attachment to the focal setting and be used to address management for recruitment of new and repeat visitors.

5.2 Management Implications

Understanding the distinctions between customers can aid pay pond owners in providing opportunities for a variety of anglers, and can aid in advertisement of their business and recruitment of new anglers. Our study suggests that fishing clubs or other exclusive memberships in this subactivity of fishing can enhance "sense of place" and encourage repeat business.

To encourage new recruits and repeat business, pay pond owners could offer season passes, or a pay pond

membership, available to visitors for purchase. A membership would allow repeat visitors to have the freedom to visit their favorite pay pond as they please with the luxury of not having to pay fees every time they show up to fish. Fishing clinics could also be hosted by the pay pond for a nominal fee. As a result, pay pond anglers might acquire skills that improve their angling and might become more adept at fishing the waters on-site, thereby increasing their success. Season passes and fishing clinics are two manners in which pay pond anglers may develop a sense of place and possibly shift towards being a more exclusive pay pond angler.

6.0 Citations

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