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RECREATIONAL OFF-HIGHWAY VEHICLE USE ON PUBLIC LANDS WITHIN UTAH

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Overview

The use of off-highway vehicles (OHVs) for recreation and other outdoor activities has exploded in popularity over the past several decades (Cordell et al., 2005). The number of registered OHVs in Utah has more than tripled in the past eight years alone, up from 51,686 in 1998, to 172,231 in 2006, a 233% increase (Smith, 2008). This increase has brought the issue of OHV use and management to the forefront for land management agencies in Utah.

While becoming a key public lands issue, the social dimension of OHV use has received little attention from recreation researchers, land managers, or policy makers. This research is intended to fill that critical knowledge gap by collecting and interpreting information around which policy and planning efforts can be

centered. This link is critical to making more informed public lands decisions as OHVs are an integral part of many recreationists' enjoyment of public lands.

In 2007, Utah State University researchers solicited information from OHV owners through a mail survey sent to a random sample of registered Utah OHV owners. The sample consisted only of owners who had registered an OHV, meaning an all-terrain vehicle (ATV), off-highway motorcycle, dune buggy, or other non-street-legal, four-wheel drive vehicle. Snowmobile owners were not included.

The information gathered centered around five primary areas: 1) basic demographics; 2) trip characteristics; 3) the importance of and satisfaction with certain management actions (including use fees); 4) the recreational motivations of, and benefits desired by, OHV owners; and 5) their level expertise and commitment to the activity.

Demographics

A primary objective of this study was to establish baseline data on the demographics of registered OHV owners with which to make comparisons in future studies. While specific management implications may not be obvious in this information, it is essential if recreation managers are to better understand and track the changes and trends in outdoor recreation visitors to public lands in Utah. Some trends did emerge; some from comparing the data collected in this study with results from previous studies (Fisher et al., 2002; Uni



Motorized recreation along the Colorado River

versity of Utah Survey Research Center, 1994). Utah's OHV owners are predominantly middle-aged. The mean age of registered OHV owners (48.65 years old) is 4.7 years older than it was just six years ago. Utah's OHV owners have also lived in Utah for nearly their entire lives, on average over 40 years. Consistent with previous surveys, we found that owners reside predominantly along the Wasatch Front. However, their residence is not proportional when compared to Utah's population as a whole—in other words, OHV owners reside in non-metro counties in larger proportions than the State's population as a whole.

Owner and Trip Characteristics

Collecting information about the characteristics of Utah's OHV owners, as well as the types of OHV activities in which they are engaging, was a primary objective of this study. We found ATV and off-highway motorcycle ownership are not only becoming increasingly popular generally, these types of owners also make up a larger proportion of OHV owners than in the past, and thus these have gained in popularity relative to other types of OHVs. Data from 2007 indicates that 93% of registered OHV owners own at least one ATV (up from 90% in 2001) and 29% own at least one off-highway motorcycle (up from 21% in 2001). The mean number of bikes and ATVs owned has also increased (ATV owners had an average of 2.1 ATVs, up from 1.8 in 2001; off-highway motorcycle owners had an average 2.0 bikes, up from 1.8 in 2001).

We also investigated OHV recreationists' experience and skill within the activity. Utah's OHV owners are a fairly experienced group with the average rider having used OHVs for over 20 years. Most (52%) consider themselves advanced riders. The prevalence of higher self-assessed experience levels is corroborated by preferences for trail conditions—most respondents (52%) indicated they prefer trails that possess a moderate amount of technical difficulty (e.g., narrow sections, steep grades, and minor drop-offs).

The prevalent conception of OHV riding as a family activity was supported as the average group consisted of more than four immediate and/or extended family members. These groups participate in a surprisingly diverse array of secondary recreational activities while engaged in OHV-centered trips or activities. These include both more passive (sightseeing and photography) and more strenuous activities (camping and



Riding ATVs at Utah's Little Sahara Sand Dunes

hiking/walking).

Another primary objective of this study was to gain a better understanding of the amounts and patterns of OHV use on public lands throughout Utah. Respondents' most recent trips, as well as all trips taken over the past 12 months, were analyzed based on the county (or state outside of Utah) of their destination. Three distinct tiers of OHV recreation visitation levels became evident through this analysis (see full report for description of statistical methods). The first of these is comprised of those counties that are most frequently the destination of OHV owners: Utah, Juab, Tooele, and Sanpete Counties. Geographically, these are all centrally located in the state, relatively close to the major population centers, and all provide unique areas that are highly popular with OHV owners. The second tier includes three counties that also have a high degree of attraction to recreationists. Though these counties are located slightly farther from the Wasatch Front, they still receive rather high levels of motorized recreation use. These are Sevier, Summit, and Wasatch Counties. The third tier includes Washington County and trips to Idaho. These areas are unique in that they are still highly visited, receive high levels of use, but are geographically isolated from the Wasatch Front population center.

An interesting trend has emerged in OHV use in Utah over the past six years. Fifty percent of all respondents who own an ATV indicate they only use it one to five times a year, compared to 41% of respondents who fell into this category in 2001. Similar trends are evident for other types of OHV use. While ownership is increasing rapidly, the number of trips taken per year per owner appears to be declining.

Importance and Satisfaction

Management implications can be derived from a better understanding of OHV recreationists' opinions on the importance of, as well as their satisfaction with, specific management actions. Specifically, we asked respondents about 1) signage, 2) information availability, 3) trailhead facilities, 4) maintenance of OHV areas, and 5) the enforcement of rules and regulations on their last trip.

Providing signage was seen as the most important type of management action, relative to the other four categories assessed (mean = 4.1 on a five-point scale where three is neutral and five is very important). This was followed closely by the importance of providing information (mean = 4.0). The mean rating for all categories was above the neutral point, indicating all items were at least somewhat important overall.

Satisfaction levels for all five management items displayed means above the neutral point (measured on a five-point scale where three represented neutral and 5 represented very satisfied), falling between 3.4 and 3.7. While this does not indicate dissatisfaction, overall, it may be indicative of some room for improvement on all five items, particularly those rated as especially important by respondents: signage and information. These also seem particularly important as confusion on the part of OHV recreationists may lead to a lack of compliance with laws and regulations about permitted locations for OHV use and may inhibit containment or concentration of use on designated routes.

Fees

Funding is a frequent and persistent problem for recreation management agencies and user fees present at least a potential and partial solution (Wellman & Propst, 2004). When asked about the acceptability of use fees for funding the five management actions discussed above, respondents generally opposed two of the three methods suggested: an additional Utah state tax on the sale of new OHVs (68% oppose, 16% neutral, and 15% support) and trailhead parking fees for all users (52% oppose, 21% neutral, and 27% support). A daily use fee for heavily used areas was the least opposed of the three options given, though approximately equal percentages of respondents opposed the idea and supported it (37% each, while 26% were neutral). If existing funding is inadequate and more

acceptable funding sources are unavailable, this form of user fee may encounter the least opposition among Utah's OHV recreating population.

Motivations and Benefits

Respondents were asked about their preferences regarding various aspects of their recreational experiences, rating each item on a five-point scale where one was very unimportant, three was neutral, and five was very important. These were grouped into several categories (following Stein & Lee, 1995) and each category was assessed by averaging the means of the responses to each survey question. Stress relief and nature appreciation items made up the category with the highest overall mean (4.46). Following this was spending time with others who share similar values (4.27). The least important group of recreation preferences dealt with meeting new people (mean = 3.18), though this item still had an overall mean above the neutral point. Such assessment of OHV recreationists' motivations is potentially useful in recreation planning, especially in understanding why certain trails or areas are more popular than others, and in choosing between potential trail segments for a designated route, for example.

Specialization

Given the explosive growth of OHV recreation and land management agencies' limited recreation management budgets, research that is useful for planning and managing public lands efficiently as well as effectively is needed. Recreation specialization—the idea that recreationists can be placed along a continuum based on their commitment to the activity, their behavior, and their skills and knowledge (Bryan, 1977; Needham et al., 2007)—accomplishes this goal by segmenting Utah's OHV owner population. Subsequently, planning and management efforts can focus on providing services and recreational activities that



OHV recreation is often a social activity

do not cater to a homogenous user group, but rather to the diverse population of OHV owners who lie along the specialization continuum.

Applying the idea of specialization, three groups emerged from a cluster analysis performed by researchers (see full report for discussion of statistical methods). These groups are best classified as: a) casual owners (54% of respondents), b) focused and experienced owners (32% of respondents), and c) frequent and highly invested owners (14% of respondents). The broadest demand for OHV recreation in Utah seems to come from casual users as they make up the majority of the OHV population. Management may want to focus the majority of resources on these owners, that is the recreationists who identify themselves as “intermediate” riders who prefer trails that do not require a great deal of skill to navigate. Managers may also decide that because these users make up the largest proportion of OHV owners in Utah, significant efforts should be made to facilitate and enhance their participation. An example of this facilitation might include an increased effort to make information available via web sites, field offices, or ranger stations geared toward a user who has said they only use their OHV for recreational purposes less than five times per year. Another example of this facilitation toward the casual owner would be to make trailhead facilities accessible and accommodating (i.e., available restroom facilities, water, and camping areas) for a user who, relative to more specialized individuals, would not have camp trailers and “toy haulers” for overnight trips.

In the design and development of OHV trails, managers need to be aware that the more common casual owner prefers trails that do not require a significant amount of technical ability to navigate. As many recreation planners are moving to identifying segments of their trail systems by their difficulty level (e.g., Utah State Parks and Recreation, 2004), they may safely assume that easy and moderate segments are likely to receive the heaviest levels of use.

Nevertheless, managers should realize that the State’s OHV owners are not a homogenous group of recre-

ationists and should not be planned for as such. Different opportunities for different types of OHV owners should be a priority if agencies are to deliver a broad spectrum of recreational opportunities.

The full professional report of this study is available online at:

http://extension.usu.edu/iort/htm/professional_date/april-2008

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