## More than the motor: Differentiating motorized recreationists

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The growth of motorized recreation continues in the US, both on public and private lands. Between 1982 to 2001, the number of participants engaged in motorized recreation grew by more than 100% and in the last decade, the growth has been more than 30% (Cordell, 2012). Although often grouped together and compared to non-motorized visitors, motorized users likely differ. Given the participation growth in these activities and the conflict associated with their activities, a better understanding of motorized group users is necessary for improved management and planning. As such, this project explored motivations, observed conflicts, and responses to conflict among participants in four motorized recreation activities: all-terrain vehicles (ATV), off-highway motorcycles (OHM), off-road vehicles (trucks; ORV), and snowmobiles.

A mail questionnaire to systematically selected registered users, employing a modified Dillman, Smyth, and Christian (2008) technique, resulted in an overall response rate of 41.4% (n=1534) and more than 1200 usable questionnaires. Among the groups, usable responses ranged from 283 to 382. The questionnaire was developed based on previous research and included a variety of sections, including those on motivations and on conflict experiences. Specifically, respondents identified 1) the importance of 20 motivations, based on Driver's (1977) classic recreational experience preferences, and 2) how often they experienced twelve potential sources of conflict (Carothers et al. 2001), and 3) how they responded to the conflict (Schneider & Hammitt, 1995). If respondents experienced conflict and if it interfered with the experience, the respondents were then asked additional questions regarding its source and how they responded to the conflict. Descriptive, factor, and comparative analysis assessed motivations, the conflict experiences, and responses to conflict.

Analysis revealed three motivational factors with high reliability: challenge/physical activity, nature/escape, and solitude/relax. Challenge/physical activity included opportunities to test skills and be physically active, nature/escape was assessed with items such as to experience nature and to get away from the usual demands of life, and items such as to be away from others and to rest mentally were used to measure solitude/relax. Three coping response factors with high reliability emerged from analysis: psychological distancing, displacement, and confrontive coping. Distancing included items such as trying to forget about it and not getting too serious about the situation while displacement involved leaving the area or site and planning to avoid it. Confrontive coping included talking to other group members, expressing anger to the person responsible for the conflict, and standing ground for what the respondent wanted.

One of the three motivational factors differed among groups: challenge/physical activity. Those who ride highway motorcycles indicated challenge and physical activity was more important than other groups. Snowmobilers also indicated challenge/physical activity was more important than ATV users. However, motivations to seek nature and relax did not differ among riders, regardless of the type of machine used.

Of the eleven sources of conflicts, ATV riders differed from the other visitors most frequently. ATV riders identified more incidents of seven types of conflict than OHM users, five more than snowmobilers, and one more than OHR riders. Snowmobilers identified fewer issues of access than either ATV users or OHR riders.

In response to conflict, ATV riders and snowmobilers employed psychological distancing more frequently than OHM and ORV riders. Snowmobilers used confrontive coping more often than ATV riders. No significant differences among the groups emerged on the use of displacement.

Mail questionnaires to registered motorized recreationists in one U.S. state revealed that motorized users differ in their motivations, conflict experiences, and responses. As such, considering them as homogenous groups is inappropriate and ineffective for optimal experience management. Specifically, OHM riders are more strongly motivated by challenges, and ATV riders have more experiences with conflict and use psychological distancing more than other groups.

Regardless of motorized vehicle for recreation, the majority of motorized trail users experience some sort conflict during a recreation trail experience. Determining if that level of conflict is acceptable is a joint decision between managers and their stakeholders. Regardless of acceptability, monitoring recreation conflict levels is imperative for effective visitor management and quality recreation experiences. One possible explanation for higher incidents of conflict among ATV riders is that they are more often part of multiple-use trail systems than the others. In the US, snowmobilers are typically the source of conflict for nonmotorized groups and have less inter-group conflict on the trails whereas OHM and OHV riders may more frequently have their own trails.

The most frequently used responses to conflict among motorized recreationists are similar to previous research and suggest the continued importance of visitor education regarding appropriate trail behavior and etiquette. Ensuring that education is effective in terms of content, placement, andactual behavioral influence is essential. As media outlets and communication preferences evolve, so should educational efforts.

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