

Indicators of Quality for Night Sky Viewing and Associated
Recreation Experiences at Acadia National Park

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This study explores the importance of night sky viewing and associated experiences to national park visitors. A survey was administered to a representative sample of 194 campers at Acadia National Park in August, 2012. Respondents were asked to 1) report whether they saw or heard items listed in the questionnaire, 2) rate the degree which seeing (or not seeing) and hearing (or not hearing) these items added to or detracted from the quality of their recreation experience, and 3) report their attitudes toward night skies and associated night recreation experiences.

Items seen/heard or not seen/heard were plotted against their effects on the quality of the recreation experience. Resulting graphs resemble Importance-Performance analysis and suggest potential indicators of quality for night sky viewing and associated night recreation. Relatively few visitors reported seeing celestial objects (in part due to overcast skies), but when they did, it added a lot to the quality of their experience. Most visitors reported that they did not see celestial objects, and this slightly detracted from the quality of their experience. Some human-caused light sources were noticed more than others, and these sources tended to detract from visitor experiences. Human-caused light sources that were noticed less tended to add to the quality of experiences.

Many visitors reported hearing human-caused sounds, which detracted from their park experiences. Not hearing these sounds added to the quality of their experiences. Fewer visitors reported hearing natural sounds, but when they did, it added to their experiences. Not hearing natural sounds tended to detract slightly from visitor experiences.

Study findings suggest a number of potential indicators of quality for night sky viewing and associated night recreation, and that night recreation can be an important part of the recreation experience at national parks and related areas.