Introduction to the Special Issue on Visitor Monitoring

Donald English  
J. M. Bowker

Donald English (denglish@fs.fed.us) Program Leader for the Forest Service’s National Visitor Use Monitoring effort, Recreation, Heritage, and Volunteer Resources staff.  
J. M. Bowker (mbowker@fs.fed.us) is a Research Social Scientist with the Forest Service, Southern Research Station.  

Acknowledgments: We want to thank the authors for their submissions and their willingness to respond quickly to the comments and suggestions from the reviewers. The reviewers, as well, deserve our thanks for high-quality and timely reviews of the submissions. Finally, we want to thank Robert Burns and his staff for overseeing this Special Issue process.

Public agencies are increasingly held accountable for documenting the benefits and services they provide. Recreation is a key public benefit for most land-managing agencies and thus visitation is an important metric. Visititation estimates are also needed for planning improvements to infrastructure, for evaluating current capacity and potential resource damages, and for communicating with nearby communities and service partners. To meet their information needs, agencies are most often interested in destination-based measures of visitation. That is, their interest is in recreation trips that end at agency lands from any origin. At the same time, agency budgets are typically not keeping pace with increased use of resources or needs for management.

Estimating visitation by expanding from what staff and managers anecdotally observe during the course of their normal workdays can be problematic. Where and when staff are onsite is seldom random, usually tending toward more heavily used areas or areas that have conflicts—either between sets of users of between users and resource conditions. A stand-alone effort and rigorous sampling framework are essential to guide data collection and obtain reliable results.

The cost of onsite personnel time for counting visits greatly limits such stand-alone efforts as sampling intensity, even in the best scenarios, can be prohibitively expensive. Most agencies augment onsite sampling with either existing counts of visitation proxies, mechanical counters, or both. Emerging technology provides new options including passive cell phone counts, social media postings and more. A number of agencies are working to evaluate these data to incorporate into visitation computations.

In this issue four papers are presented that highlight important aspects of estimating recreation visitation.
Snider, Hill, Simmons, and Herstine describe a general framework for gathering the data needed to quantify annual visitation at individual recreation sites. Their framework presents important dimensions for stratifying the sample of locations and days on which to collect data. The paper discusses considerations of how to group sites into spatial aggregates and some of the empirical data needed to validate the stratification framework. A key point is that rigorous sampling covering all identified strata is essential.

Jones, Yang, and Yamamoto present a comparison of automated and visual counting methods, juxtaposing estimates from infrared counter technology to those obtained by more expensive visual count. They note that calibration of mechanical counters to a reliable control is often difficult to achieve. Patterns of variation in the comparison of counts from the two methods are presented and discussed.

Ziesler and Pettebone review the processes used for estimating visitation to units of the U.S. National Park System. They note the importance of using an array of information and techniques in order to match the variety of available data as well as the openness and modes of public access across the NPS system.

Leeworthy, Schwarzmann, Goedeke, Gonyo, and Bauer describe a quite different approach. They begin with an origin (i.e., household)-based estimate of visits from a targeted geography. Using a mapping exercise competed by respondents to the household survey enables spatial allocation of trips and activities to destination areas. Validating the mapping exercise is essential to reliable results.