

VOLUNTEERS AND MAMMAL MONITORING: AN EFFECTIVE COMBINATION?

The National Park Service and many conservation organizations rely heavily on volunteers to achieve tasks for which funding is limited. Moreover, information gathered by non-professionals completes many research projects. Nevertheless, attempts to calibrate the effectiveness of volunteers and validate the collected data are rare. To address this concern, Newman et al. (2003) assessed 155 volunteers and the data they collected during a mammal monitoring project at Wytham Woods, Oxfordshire, England. Volunteers came from various social and educational backgrounds: students, professionals, retired, probation services, and drug rehabilitation programs, and from both inside and outside Britain.

The study revealed that gender, training, previous experience, and physical fitness had significant effects on volunteer suitability for several different tasks, whereas age and mental aptitude had no influence on volunteer performance.

Gender—Men performed significantly better than women in mammal monitoring methods, for example, finding deer droppings in experimental quadrants. As it happens, the highest and lowest scores were both women, but the variance in the median scores was consistently higher in women than it was in men. Generally, women in the sample were more hesitant than men, and sometimes had to be persuaded to perform certain tasks such as handling mice or touching deer droppings. This hesitancy set these individuals back relative to their contemporaries, reducing their overall ability to perform the task.

Training—Practical field training and demonstrations proved essential for all monitoring techniques used in this study. Without this training, volunteers were generally unable to perform the required tasks (even when supplied with written instructions).

Background and previous experience—People from disadvantaged backgrounds, as exemplified in the sample by

those from drug rehabilitation programs, showed no hesitation to undertake certain tasks; indeed, they were generally among the highest scoring volunteers. Although previous experience did not improve the success rate of volunteers (e.g., finding deer droppings), experienced volunteers took significantly less time to carry out surveys.

Physical fitness—Overall fitness had a significant influence on the mean perceived usefulness and capacity of volunteers, with fitter people being perceived by the researchers to be better suited to the tasks than less fit people.

This study found that with appropriate training, volunteers were able to perform tasks reliably and accurately. Basic training consisted of a half day per focal species, including background theory, practical demonstration, and initial close supervision of volunteers (as a cautionary measure to ensure animal welfare and volunteer safety). Researchers emphasize the importance of training, albeit time consuming. They explain that many volunteers can be trained simultaneously, which represents a time- and cost-effective method for ultimately increasing the number of people able to continue to collect scientific data for wildlife conservation, especially if the trained volunteers are able to make a long-term commitment to a wildlife conservation project.

Reference

Newman, C., C. D. Buesching, and D. W. Macdonald. 2003. Validating mammal monitoring methods and assessing the performance of volunteers in wildlife conservation—“*Sed quis custodiet ipsos custodiet?*” *Biological Conservation* 113:189–297.