

# **Expert ethics, novice knowledge: analyzing conventional and alternative approaches to low-impact education**

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## **Abstract**

Leave no trace (LNT) education is a primary mechanism by which park managers seek to minimize the impacts recreationists can have on protected resources. Such efforts generally assume and rely upon recognition of recreation-related impacts and an ethical perspective oriented toward mitigating impacts. While this knowledge and ethical orientation is common among the managers and researchers who design and apply LNT programs, evidence suggests that they may be much less common among recreationists who are the target of LNT programs. Consequently, LNT efforts that emphasize the knowledge and ethics of experts may be less than fully successful at guiding the behavior of novices. To analyze the nature of this misalignment, an experiment and associated survey were conducted in Acadia National Park. The experiment presented recreationists with alternative impact mitigation messages. Two of these messages encouraged visitors to engage in impact-mitigating behaviors to protect park resources. Another message emphasized engaging in behaviors that would improve visitors' recreation experiences, while also mitigating impacts. These experimental treatments were accompanied by a survey that measured a number of descriptive components, such as reported engagement in impact mitigating behaviors, knowledge of LNT practices, and recollections of LNT messages. Evaluative components were also measured by the degree of impact perceived by visitors, their perception of resource conditions, and their attitudes toward alternative management actions. Analyses consider the: relative influence of LNT messages on LNT knowledge, perceptions of impacts, and impact-mitigating behaviors. These analyses highlight characteristics of effective LNT messages and the differential knowledge and ethics that underlie expert and novice perspectives.