

# Predictive Value of Wildlife Value Orientations for Acceptance of Management Interventions

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Human – wildlife interactions often lead to problems (e.g., damage) that people want solved. Yet, managers cannot just expect interventions to be accepted, as people might differ in their acceptance of interventions.

Wildlife value orientations (WVO's) reflect patterns of basic beliefs that give meaning and direction to fundamental values in the context of wildlife. This concept denotes general cognitions about wildlife, and is used in research to explain specific cognitions, e.g. acceptance of interventions. Previous studies have identified two primary WVO's. A domination orientation reflects the belief that wildlife should be managed for human benefit. Mutualists view wildlife as part of an extended family, deserving of rights and care. The aim of this paper is to examine to which extent WVO's predict acceptance of management interventions. Specifically, we investigated how this predictive value varies across two contextual characteristics: (1) intervention severity (i.e. the degree of harm to wildlife) and (2) problem severity (i.e. the severity of the wildlife problem for humans).

In a mail survey (n = 353), WVO's were measured with a psychometric scale that comprises 4 basic belief domains: appropriate use (6 items), hunting (4), social affiliation (4), and caring (5) (see Vaske, Jacobs & Sijtsma, 2011, for specific items). Composite indices for domination ( $\alpha = .85$ ) and mutualism ( $\alpha = .88$ ) were used for inferential analyses. Acceptance was measured as a dichotomous variable for various scenarios that presented different levels of problem severity and potential interventions that represented various levels of intervention severity.

WVO's explained 35 to 42% of the variability of acceptance of the most severe interventions (lethal control), 5 to 17% of

acceptance of the least severe intervention (doing nothing), and 1 to 9% of acceptance of the intermediate intervention (preventing offspring). WVO's were better predictors for acceptance of severe interventions in scenarios that implied a problem for humans (e.g. damage to crops) than in scenarios that did not involve a problem for humans (e.g. herbivores starve during winter).

By logical necessity, WVO's imply value priorities: only if WVO's prioritize values they can truly direct thought. The predictive value of WVO's is therefore likely to be higher in cases that entail potential internal value conflicts, as WVO's offer a pre-established frame for conflict resolution by prioritizing values. This feature of WVO's might explain our finding that predictive values were highest for acceptance of lethal control, as this intervention probably entails a strong internal value conflict. Also, the intermediate intervention might potentially solve the problem without harming wildlife too much, and thus WVO's were very weak predictors of acceptance since these interventions don't trigger value conflicts.

As lethal control is often a controversial management intervention, and intermediate interventions are better accepted by the general public, wildlife managers could consider non-lethal interventions. Moreover, raising public support of lethal control interventions is not easy, since acceptance is strongly influenced by WVO's, which consist of general wildlife related thought that is relatively resistant to change.

## References

- Vaske, J. J., Jacobs, M. H. & Sijtsma, M. T. J. (2011). Wildlife Value Orientations and Demographics in the Netherlands. *European Journal of Wildlife Research*, In Press, DOI 10.1007/s10344-011-0531-0