

Values and Their Potential Role in Grizzly Bear Conservation

BY COURTNEY HUGHES

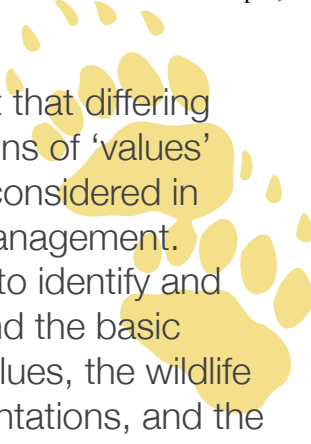


What does the term ‘values’ mean and does the term have different meanings to different people? What do different meanings of the term signify for grizzly bear conservation in Alberta? I am deeply interested in the discussion around the term ‘values’ and what this term means relative to how people ‘value’ wildlife, and in particular grizzly bears, in Alberta. Moreover, I am interested in understanding what different balances in the conception of the term ‘values’ means for the long-term conservation of grizzly bears. Given this interest I have embarked on a PhD journey at the University of Alberta to uncover and understand the ‘values’ people hold with respect to grizzly bears in Alberta and how differing conceptions of ‘value’ might influence or impact the long-term, sustainable persistence of these animals. In this paper I offer some considerations for the term ‘value or ‘values,’ and try to highlight my assumptions around what these conceptions may mean for long-term grizzly bear conservation in Alberta.

According to social psychologist Milton Rokeach, *basic human values* may be broadly described as the “preferences, duties, moral obligations, desires, wants, goals, needs, aversions or attractions... [or the] standards of preference” that are applied by people, explicitly or implicitly, to thought and action in daily life. These basic values, which may include respect, honesty, integrity, compassion, accountability, and so on, are learned and constructed through our experiences as individuals and through our family or community interactions. Thus basic values are reinforced by our cultural context; they are not only constructed through our everyday interactions and decision-making processes.

So what do basic human values have to do with the conservation of grizzly bears? Well, literature suggests that the basic values people hold for each other, for human-human interactions, are often

similarly shared for human-wildlife or human-environment interactions. The caveat, as there are always caveats, is that this is, in fact, not always true. There are, for example, conflicts or clashes between values based on any given situation a person is in. If, for example, someone’s personal safety is threatened by a charging grizzly bear their compassion for the bear as a living creature may be forgotten. Self-preservation trumps all other considerations. In another example,



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a person may respect grizzly bears as a being that exists within an ecosystem and yet still want to hunt and kill the bear as a trophy animal. As such, the term ‘value’ applied at a basic level is still quite subjective and the priority of these different meanings will vary according to specific contexts.

So, what else needs to be described relative to the term ‘value?’ If basic human values are of limited use in helping to explain how people might value grizzly bears (or other species or landscapes for that matter), what other conceptions of the term should be considered? Other studies suggest that basic values give rise to more

specific *value orientations* towards an object or subject. For example, Teel et al found in their 2005 study that in the western United States the public’s wildlife value orientations vary from one state to another. These value orientations generally describe how people think and feel about wildlife and wildlife management. They found the most commonly held dimensions to be utilitarianism, mutualism, pluralism, and distanced. Utilitarianism describes a philosophy of human use of wildlife where individuals strongly support hunting and fishing. Mutualism is where wildlife is considered to be a part of an extended, non-human family; people and wildlife coexist without fear of each other. Pluralism exists where both utilitarian and mutualism value orientations are shared and specific situations dictate what appropriate individual action looks like. Distanced is where neither a utilitarian or mutualism value orientation is held and people tend to have higher concern for personal safety when around wildlife. Generally, Teel et al reported that utilitarians and pluralists are male, older, more likely to hunt, and have lived in their state for longer than those identified as mutualists or distanced.

Why does this information matter? Identifying the wildlife value orientations people hold can be used to provide insight into or predict how people might think about or behave towards wildlife or wildlife policy; this information may assist decision-makers in determining what policies might be more socially acceptable in a jurisdiction and what management actions are more likely to be adopted and enacted. However, the methods and tools (e.g. values surveys) used to elicit this information do not necessarily explain the more specific ‘values’ held for grizzly bears; this is in part why I am particularly interested in exploring how and why people might construct differing ‘values’ for grizzly

bears. A distinction needs to be made here, between my use of the term ‘values’ relative to a particular sentiment towards grizzly bears, and what researchers in human dimensions of wildlife would call ‘attitudes.’ I agree people construct and hold broader value orientations towards wildlife, and studies have proven this to be true, as illustrated above. However, I think people can also construct more specific ‘values’ for a particular animal, like grizzly bears, in and of themselves. In literature, these more specific ‘values’ are referred to as attitudes and are thought to guide the behaviors people take towards an animal (Teel et al. 2005). While I generally agree with the values-attitudes-behaviors framework, I do think there is more to how and why people come to value grizzly bears; I explain more below while conceding here that an understanding of the value orientations and attitudes people hold for wildlife will have important implications for long-term conservation, particularly in the policy arena.

In struggling to define what the more specific ‘values’ people hold for grizzly bears actually are, I have developed three general descriptions of ‘values.’ First, I suggest we consider the *functional values* of grizzly bears. These values refer to their biological and ecological significance of these bears as a top predator in an ecosystem. Functional values can be understood as both the ways in which “organisms acquire and then make use of resources in metabolism, movement, growth [and] reproduction” (Wootton 1984), as well as how organisms function in a system and what their interactions produce for, or do to, a system. Within this definition, considerations are given to functional richness, functional evenness and functional divergence, and each can be determined relatively simply (Norman et al. 2005). Through this conception of value, conservation biologists and resource managers may determine the relative importance of a species in a community. Alter or remove the species from the ecosystem and changes to that system are inevitable.

Take trophic cascades as an example; studies support that when top predators are removed from an ecosystem resulting impacts can include growth in native and domestic herbivore populations, release of meso-carnivores, changes in

prey behavior, and even the facilitation of disease or invasive species, locally (Berger et al. 2001). In Alberta, Dr. Scott Nielsen and wildlife biologist Karen Graham, from the University of Alberta’s Applied Conservation Ecology (ACE) Lab and the Foothills Research Institute (FRI), are learning about the functional role of grizzly bears in the southern Canadian Rockies. This work seeks to quantify the extent and intensity of soil disturbance behaviors caused by grizzly bears, as well as to assess how the bears’ activities might regulate local ecosystem processes, the structure of communities, and the composition and diversity of other species. Understanding how grizzly bears affect communities may enable better conservation decisions to be made, where decisions could be based on the possible consequences of losing these bears in a particular place. This is important work indeed, and as Kellert has offered “successful bear management depends... on an accurate understanding of bear biology and ecology” (1994). Better information about the functional value of grizzly bears is one way to strengthen the position of those people who ‘value’ animals this way, in Alberta.

A second consideration for the term ‘value’, and one I suggest is most often at play in the political and to some extent social arena, is the *economic value* of grizzly bears. Economic values are, for the most part, driven by market forces that, generally, are based on the dollar value people as individuals or within groups assign to a good or service. Broadly speaking, there are two types of ‘values;’ use values, which King and Mazzotta define as “the value derived from the actual use of a good or service” (2000) and can include activities such as hunting, hiking or off-road vehicle use in a place. These values include a monetary assessment of the worth the good or service provides to people. Alternatively, they describe nonuse values as the intrinsic importance assigned to a subject or object; they are not associated with a use value (or the option to use). Both use and nonuse values can be measured and both can have a dollar amount ascribed to them; these values can also be conceived of as costs or benefits to people, such as the financial requirements for enforcement activities to conserve grizzly bears, or the revenue generated from recreation or tourism activities in a

place with grizzly bears.

While economic values are important to consider, I suggest they fall short as a social measure of uncovering and making explicit the intangible reasons of what, why, and how people come to “value” an object or subject, or in this case, grizzly bears. While I admit that nonuse measures attempt to identify the intangible values a person ascribes to a subject or object, I believe the attempts to monetize these values does a disservice to their significance.

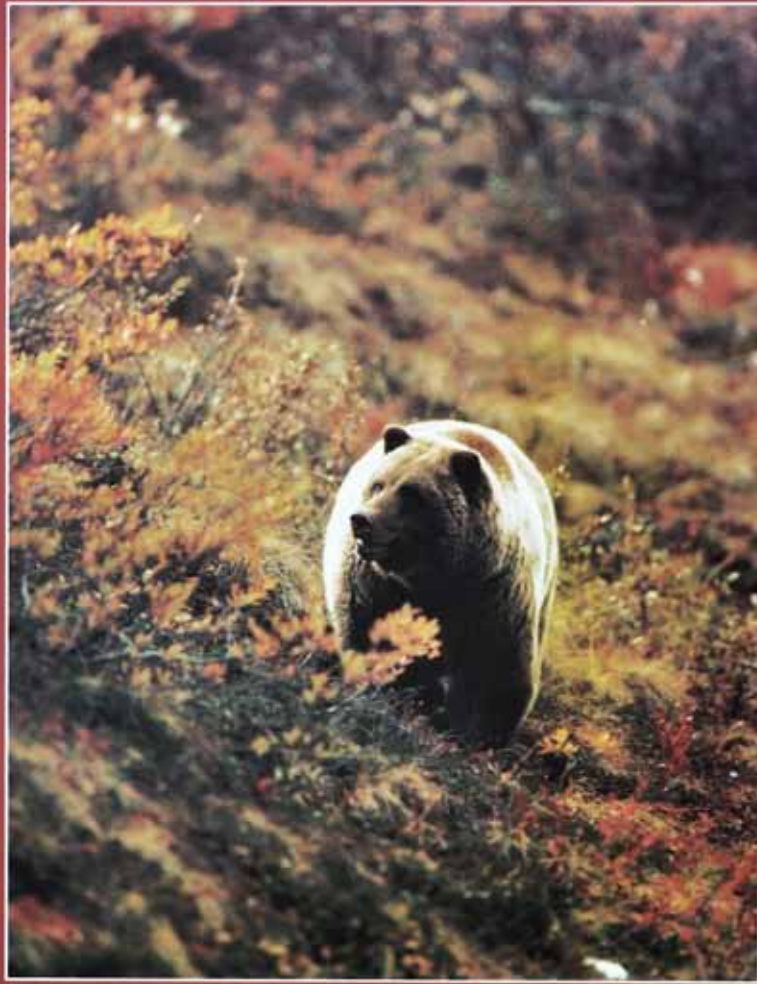
For this reason I offer a third type of ‘value’ to consider, one that describes the construction of meaning of value from a social and cultural, or socio-cultural context. I use the phrase *socio-cultural values* to refer to the intangible, or ‘just because’ reasoning of why people decide grizzly bears are important to them. Socio-cultural values, however, are difficult to clarify because of their very nature; these values are held deep within a person and are oftentimes abstract. Thus, I identify these values as ‘just because’ values, in that a person might come to value something ‘just because’ and this is the best explanation they can give for their decision.

Notwithstanding this ambiguity I offer the following examples in order to try to provide a bit more clarity. I suggest the intangible, or ‘just because,’ values people hold towards grizzly bears might include the affinity an individual has for these bears, because they feel a connection to this animal. I can empathize as I share a similar connection to felines; I like cats for reasons that are equally easy and difficult for me to explain. Another ‘just because’ value example might be the symbolic significance grizzly bears have to Alberta, as part of cultural heritage; people might value these bears because of what this representative icon means to the province and not because of the potential economic revenue. Again, I recognize economists may argue there is overlap between socio-cultural values and economic nonuse values. I agree to some extent but with this caution: the difference between socio-cultural and economic nonuse values is based on more than just why and how people construct their ‘values’ for grizzly bears. It’s also based on how these values are measured and communicated. While economists may, in fact, be able to monetize the

symbolic value of grizzly bears through tourism revenue, does that necessarily help us explain the full value of grizzly bears to Albertans? Does a monetary measure truly satisfy the scope of and reasoning for holding our value? What does a monetized value do for the sentence of grizzly bears, as a living being? Even if socio-cultural and nonuse economic values are similar, I suggest we avoid monetizing socio-cultural values; I think doing so may pervert the substance of socio-cultural values and reduce or simplify them in unhelpful ways. That said, I suggest policy-level decision-makers and conservation practitioners alike need to consider socio-cultural values at the same level as, and as a complement to, economic values for grizzly bears rather than pit one value type against another.

Overall, I suggest that differing conceptions of 'values' must be considered in wildlife management. We need to identify and understand the basic human values, the wildlife value orientations, and the more specific functional, economic and socio-cultural values Albertans hold towards grizzly bears. All value conceptualizations must be equally considered in the decision making realm because all conceptions are important to people. As Kellert suggested 28 years ago, "the recognition and understanding of bear policy as a complex web of interacting scientific,

THE GREAT BEAR



When he's gone~
so is wilderness

Photo by Alan Carey



valuational, and political forces can enhance the chances for developing more successful policies, as well as increase the opportunities for greater professional effectiveness" (1994). Through my PhD research, I hope to shed light on the socio-cultural values Albertans hold towards grizzlies, and what this means in light of our budding understanding of

their functional and economic values. The challenge then, is set for me and for Alberta. 🐾

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