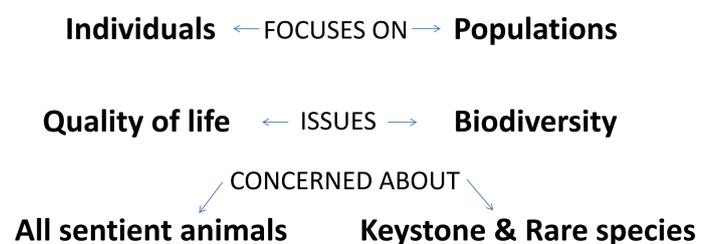


As the field of Human Dimensions research evolves, a new dimension of “humane” considerations in wildlife management should be investigated. Animal Welfare and Conservation share a common goal to reduce human impacts on wildlife.

“Wildlife Values Survey – Navigating Harm” was an online survey conducted in 2010 designed to facilitate informed discussion and explore attitudes about complex ethical issues related to animal welfare, policy, and wildlife management in BC.

Welfare

Conservation



Do they have to be in conflict? Not necessarily...

Because considerations for animal welfare can not only increase public acceptance of conservation strategies but improve results of traditional wildlife management practices

Examples of win-win scenarios for Animal Welfare and Conservation:

- 1) Reducing pain in marking techniques (e.g. branding Steller sea lions)
 - Improve recovery from procedures to avoid confounding life history data
- 2) Minimizing suffering in pest control methods (e.g. poisoning invasive species)
 - Reduce duration of pain to avoid public resistance of conservation efforts
- 3) Preparing animals for translocation (e.g. endangered species re-establishment)
 - Better survival after release
- 4) Rehabilitation of flagship species (e.g. Grizzly bears, Burrowing owls)
 - Increases public awareness and concern for habitat protection

SURVEY PARTICIPANTS » 371 completed surveys including 125 professionals/enthusiasts engaged with wildlife (WPE)
 Male : Female response ratio 1:2
 Urban : Rural response ratio 2:1

RECRUITMENT » BC wildlife professionals or dedicated enthusiasts recruited through government agencies, academia, professional associations, nature and wildlife organizations; BC members of the public with wildlife interest but no direct involvement, through e-newsletters, word-of-mouth and general website hits

MIXED METHODS SURVEY » Quantitative and Qualitative questions

Example Question 6 - Score acceptable level of invasiveness in bear population monitoring and reduction methods:

Wildlife Values Survey - Navigating Harm

Question 6 of 7

An isolated British Columbia community is concerned about the rapid growth of a local bear population and potential conflicts that may arise. Outdoor enthusiasts and community members are reporting increased sightings of bears, especially more mother bears with cubs in recent years. Local wildlife managers would like to determine if the bear population is experiencing a population boom since bear food and habitat are limited. A number of monitoring and population reduction strategies are being considered. How do you rank the following techniques in terms of posing an acceptable harm to the bears?

MONITORING ACTIVITY

If costs for the below activities were equal, select how acceptable the harm posed to bears by the described techniques are:

	Not acceptable	Slightly acceptable	Somewhat acceptable	Mostly acceptable	Completely acceptable	Unsure
a) Remote observations with motion-activated cameras to photograph bears	<input type="radio"/>					
b) Individuals conduct field surveys on site and visually search for the bears	<input type="radio"/>					
c) Barbed wire is wrapped around natural rubbing trees (does not hurt bears); hair is removed when bears rub on tree and hair is tested for DNA to identify individual bears	<input type="radio"/>					
d) Trap and sedate several bears to place radio-collars on them which emit signals to monitor; radio-collars are programmed to fall off a few months later	<input type="radio"/>					
e) Trap, drug and surgically implant abdominal tracking devices into several bears; implants emit monitoring signals for over a year	<input type="radio"/>					

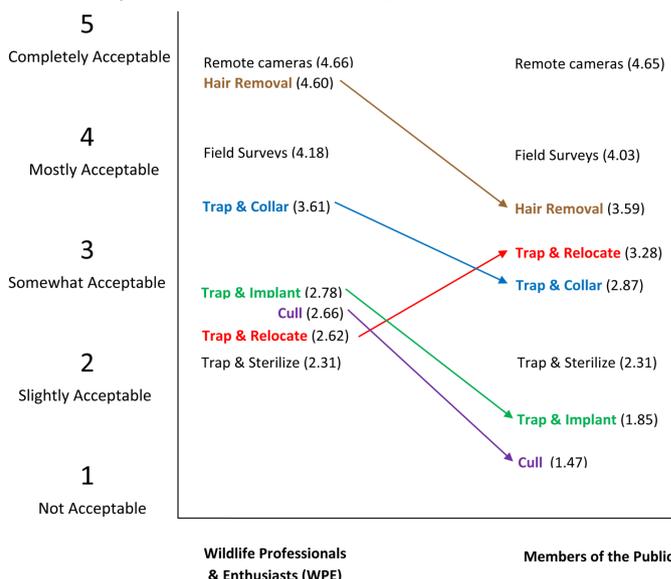
POPULATION REDUCTION METHODS

Based on the population and movement studies, action must be taken to reduce the bear population to prevent competition among bears over food and habitat and conflict with the local community.

If costs of these three strategies were equal, consider the following:

	Not acceptable	Slightly acceptable	Somewhat acceptable	Mostly acceptable	Completely acceptable	Unsure
f) Trap, drug and relocate enough bears to another area to balance population	<input type="radio"/>					
g) Trap, drug and sterilize enough bears so population rates will drop	<input type="radio"/>					
h) Cull enough bears to balance the population	<input type="radio"/>					

Mean Acceptability of Management Practice by Group (arrows indicate statistically significant differences)



- Major differences were observed between WPE and the public
- WPE are engaged with wildlife practices and approach issues from a conservation viewpoint
- The public approaches issues from an animal welfare perspective and are less accepting of hair removal, radio collars, implants and culling strategies – but more supportive of relocation
- Differences in beliefs may stem from both knowledge and ethical disparities
- The public may be unaware of the poor conservation and welfare outcomes of relocations and the positive findings from non-invasive hair removal
- WPE may not recognize the sensitivity of the public to invasive management interventions

CONCLUSIONS » The biggest difference in beliefs exists between the public and wildlife professionals/enthusiasts rather than traditional divides (gender, urban/rural). To overcome these challenges, WPE must use effective communication tools to relay the benefits of research

methods that are seen to be less acceptable to the public. However, to propose management methods such as culling or not relocating wildlife, conservation needs the assistance of animal welfare ethics to navigate the overall harms to wildlife and receive societal permission.