

Understanding People's Willingness to Implement Measures to Manage Human-Bear Conflict in Florida

Elizabeth F. Pienaar
University of Florida

David Telesco and Sarah Barrett
Florida Fish and Wildlife Conservation Commission (FWC)

Management of the Florida Black Bear

- * FWC is responsible for managing the Florida black bear
- * Management of black bears
 - * Maintain a sustainable statewide bear population
 - * Maintain sufficient habitat to support the bear population
- * Management of human-bear conflicts
 - * Improve Florida citizens' understanding of bears
 - * Increase public support for bear conservation
 - * Persuade the public to adopt measures to reduce conflicts

Problem

- * People do not understand or accept their role in creating and managing human-bear conflicts
- * Outreach programs use persuasive messaging to alter people's behavior
- * Only affects human behavior indirectly (4 step process)
 1. Understand and accept outreach information
 2. Alter beliefs and attitudes
 3. Alter intended behavior
 4. Change actual behavior

How Effective are FWC Outreach Efforts?

- * Bear-related calls: doubled from 3,337 to 6,728
- * Increase in the population of people (> 19.5 million) and black bears (> 3,000)
- * Increase in high-density human populations next to high-density bear populations
- * Increased awareness that human-bear conflicts should be reported to the FWC
- * Pageviews for the FWC's Florida black bear webpage (Dec 2012 - May 2014) = 37,730 (2,096/month)

Survey

- * Callers surveyed 3 to 12 months after first contacted FWC
 - * 1,649 completed surveys for 2009 to 2012
- * Questions:
 - * Assistance provided: verbal assistance, literature, property visit
 - * Suggested conflict management measures
 - * Did the respondent implement these measures?
 - * Measures implemented
 - * Reasons for not implementing measures
 - * Non-recommended measures taken
 - * Was the FWC was helpful?

Results

- * 1,314 individuals (79.7 %) stated they followed FWC advice
- * Increased probability followed FWC advice:
 - * Higher number of bear interactions prior to contacting FWC
 - * FWC had been 'helpful' to them
- * Decreased probability followed FWC advice:
 - * Did not like suggested measures
 - * Measures were too expensive or time consuming
 - * Problem was larger than the individual could manage alone
 - * Trash service did not permit proper trash handling
- * No relationship between type of outreach and probability that individuals followed advice

Results (Continued)

- * Positive relationship between type of conflict reported and adoption of the appropriate conflict management measure
 - * Suggests that people reported conflicts accurately
 - * Suggests that people understood FWC advice
- * Positive relationship between suggested conflict management measures and adoption of those measures
 - * Subset of individuals changed their behavior based on outreach
 - * Why did some individuals alter their behavior and others did not?

Management Recommendations for Wildlife Agencies

- * Continue advice on removing or securing attractants
 - * 56.2% of respondents engaged in proper trash handling
- * Survey the public to determine whether
 - * read and understand outreach materials
 - * outreach materials address beliefs and attitudes that contradict agency communications
- * Assess how people are modifying their behavior
 - * Which conflict management measures are people adopting?
 - * Why do people adopt or reject suggested measures?
 - * Are changes to human behavior permanent?