The Cognitive Hierarchy and Fishing Preferences: Wildlife Value Orientations of Pine Creek Valley Anglers

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Theoretical background

- Wildlife value orientations (WVOs) predict:
  - Hunting and fishing participation
  - Acceptability of wildlife management actions

- Less is known about WVOs and hunter and angler preferences

- We hypothesized that WVOs would predict anglers fishing and regulatory preferences
Study area

- Pine Creek Valley, Pennsylvania

- Pine Creek
  - Large coldwater/warmwater stream
  - Stocked trout fishery in spring and early summer
  - Warmwater fishery in lower reaches

- Coldwater tributaries
  - Wild trout and restrictive regulations

- Conflict regarding bag limits, methods of take, and regulation of coldwater refugia
Angler survey methods

- Two methods of distributing questionnaires
  - Mailed to anglers who were recruited on stream (part of a creel survey)
  - Distributed in valley businesses and campgrounds

- Total of 222 useable responses
  - Appropriate for assessing relationships among psychological variables
  - Not appropriate for describing population
Results

Hypothesis supported

WVOs predicted:
- Angler preferences for number and size of fish caught and number of fish kept
- Angler support for restrictive regulations for coldwater refugia for trout

Time spent fishing in waters with restrictive regulations was weakly predicted
Conclusions

- WVOs predict differences among anglers
  - Not only differences between anglers and non-anglers

- Finding consistent with cognitive hierarchy
  - Humans use both broad, abstract values and specific, concrete beliefs to evaluate situations

- Complex relationship between WVOs and specific, situational beliefs
  - Understanding relationship can improve management decision-making