

Carrying Capacity — What is It?

Management of individual species

Goal: id max number individuals that can exist without damaging resource base

- Wildlife managers encountered problems in applying the concept in the field
- Very simple model has limitations:
 - does not account for other factors changing resource base
 - nor for other species
- Biological management has since evolved into complex ecosystem modeling approaches

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Carrying Capacity

In Wildlife Management

- Useful conceptual model
- Not a useful empirical model

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Human Carrying Capacity

Expands scope of concept enormously

How many individuals

- of what species
- acting in what ways
- enjoying what quality of life

can occupy the environment
on a long-term, sustainable basis?

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Carrying Capacity — Do's & Don'ts

No standard methodology exists

Carrying capacity studies are not "consensus" science, rather they are "frontier" science

Exciting endeavors, lots of uncertainty attached

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Carrying Capacity — Do's & Don'ts

Do's

- Be very explicit about the scope & goals of the study*
- Incorporate public involvement into the planning & analysis phases of the study*
- Be realistic about what can & can't be accomplished*
- Acknowledge uncertainty*

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Carrying Capacity — Do's & Don'ts

Don'ts

- Don't extrapolate beyond the study's scope/ data*

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*Keys Carrying Capacity Study
How can this Study be Improved?*

Based on Peer-Reviewers' Comments

- Feasibility
 - Clarity of goals /objectives
 - Approach
 - Time / \$
 - Adaptive Management
- Public Participation
- Emphasis on Human Infrastructure

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*Keys Carrying Capacity Study
How can this Study be Improved?*

Technical Issues:

- Data Availability
- Scenarios
- Modelling Approach
- Thresholds
- Interactions/Integration across Elements

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