

Wildlife Management Education Goes Urban

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The Goals of This Presentation

- More clearly articulate what *urban* wildlife management is all about.
- Provide guidance in the development of curricula and courses on urban wildlife management.
- Define the urban wildlife management profession.

WILDLIFE MANAGEMENT COMPARISONS IN HUMAN-ALTERED URBAN VS. NATURAL RURAL HABITATS**SIMILARITIES = 7**

Involves game, nongame, exotic, or threatened/endangered species.

Use standard wildlife management procedures, e.g., the *Wildlife Management Techniques Manual*.

Action requires input, participation and oversight by state or Federal wildlife agencies.

Preparation in college-level wildlife management courses required.

Potential economic losses or gains are the primary catalysts for management action.

Wildlife management goals are both proactive and reactive.

Use professional and popular outlets to disseminate the status of information to the WHOLE community.

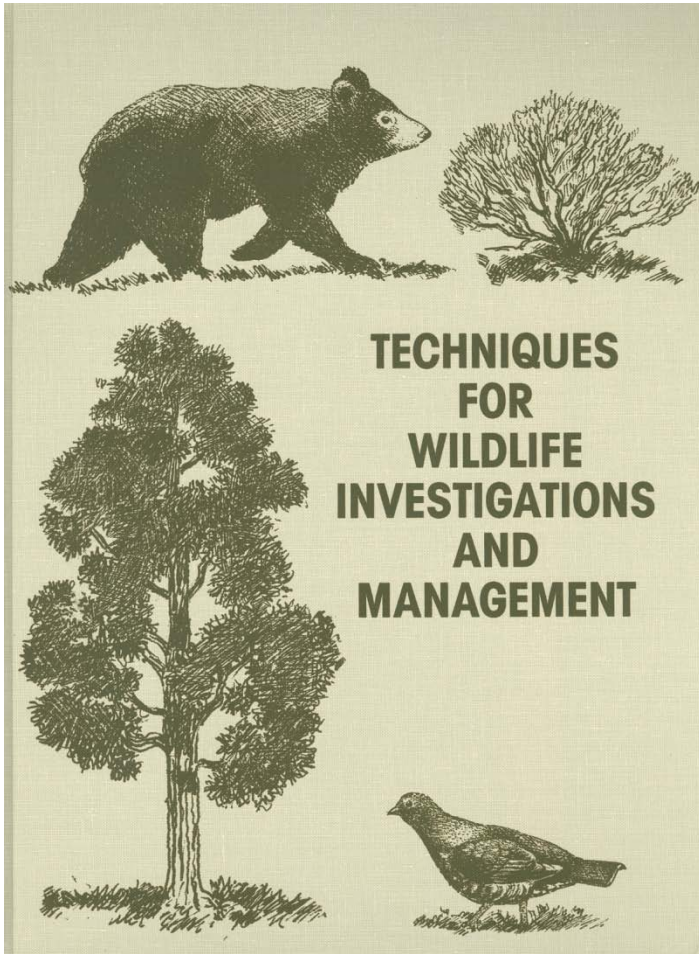
DIFFERENCES = 14

Urban	Rural
Lower diversity of native plant and animal species ¹	Higher diversity of native plant and animal species.
Fewer sources of state and Federal funding for management programs.	More sources of state and Federal funding for management programs.
A new and developing focus for research, management, and education programs.	A large and established focus for research, management, and education programs.
Layers of jurisdiction increase with proximity to urban centers.	Layers of jurisdiction decrease with distance from urban centers.
Small scales of analysis with many legal and physical impediments in highly fragmented landscapes.	Large scales of analysis with few legal and physical impediments in less fragmented landscapes.
Requires extensive training and experience in the human dimensions of wildlife management ² .	Requires less training and experience in the human dimensions of wildlife management ² .
Limited academic and agency acceptance and participation.	Wide academic and agency acceptance and participation.
Residents have a more heterogeneous set of attitudes and expectations related to wildlife management.	Residents have a more homogeneous set of attitudes and expectations related to wildlife management.
Higher level of public demand for inclusion in the management process.	Lower level of public demand for inclusion in the management process.
Higher potential for threat to public health from zoonotic disease and parasites.	Lower potential for threat to public health from zoonotic disease and parasites.
Management to reduce artificially abundant wildlife populations.	Management to sustain artificially abundant wildlife populations.
Growing trend toward privatization and commercialization of wildlife management.	Majority of management efforts coordinated through state or Federal agencies.
Exaggerated time frame for completion of management activities	Significantly shorter time frame for completion of management activities
Managers may not have required training in wildlife management	Managers have required training in wildlife management

Similarities: Number 1

- Involve game, nongame, exotic, or threatened/endangered species.
 - Game: white-tailed and mule deer, geese, bears, moose
 - Nongame: coyotes, raccoons, bats, birds, snakes
 - Exotics: rock doves, nutria, crows, hogs, cats
 - T/E: kit fox, key deer, peregrine falcons

Similarities: Number 2



Use standard wildlife management techniques.

Similarities: Number 3

Require oversight by
federal or state agencies.



Similarities: Number 4

- Preparation in wildlife management courses is required.
 - “ologies”
 - Management
 - Laws
 - Techniques
 - Policies and Decision-making Process
 - Communication

Similarities: Number 5

Potential economic losses or gains are primary catalysts for management actions.



Similarities: Number 6

- Wildlife management goals
 - Proactive: addresses root-causes
 - Reactive: addresses the symptoms

Similarities: Number 7

- Disseminate the status of information to the WHOLE community.
 - Professional: journals, conferences, extension publications
 - Popular: news media, web sites, brochures

Differences: Number 1

Rural

- Higher diversity of native plant and animal species



Urban

- Lower diversity of plant and animal species.



Differences: Number 2

Rural

More sources of state and federal funding for management programs.



Urban

Fewer sources of state and federal funding for management programs.



Differences: Number 3

Rural

- A large and established focus for research, management, and education programs



ASSOCIATION *of*
FISH & WILDLIFE
AGENCIES

The Association of Fish and Wildlife Agencies—the organization that represents North America’s fish and wildlife agencies—promotes sound management and conservation, and speaks with a unified voice on important fish and wildlife issues.

Urban

- A small but developing focus for research, management, and education programs.

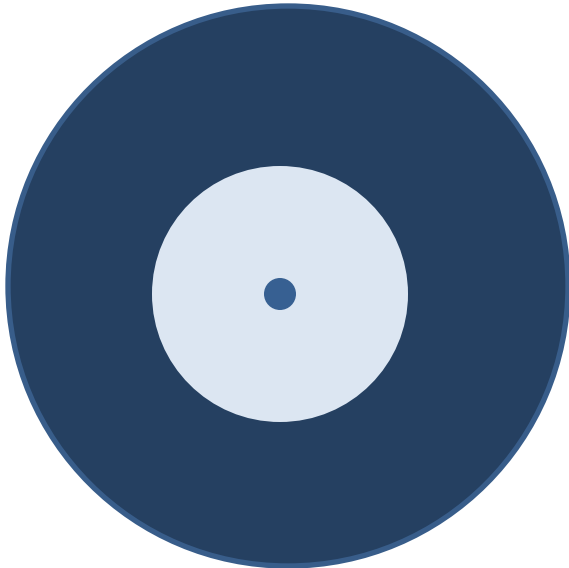


Urban Wildlife Working
Group

Differences: Number 4

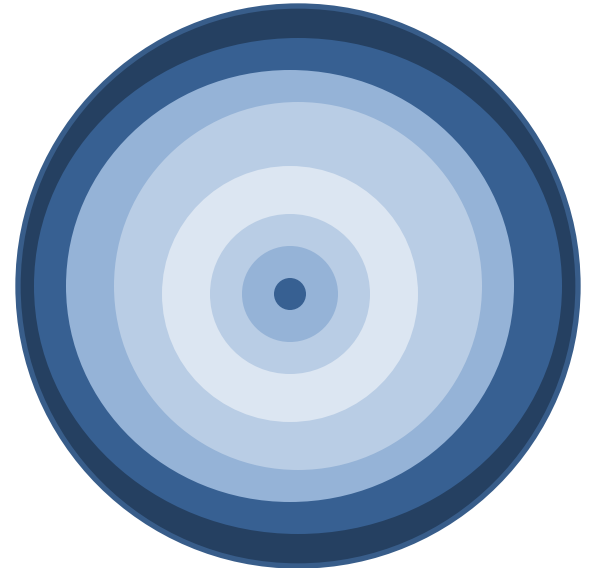
Rural

Layers of legal and political jurisdiction decrease with distance from urban centers.



Urban

Layers of legal and political jurisdiction increase with proximity to urban centers.



Differences: Number 5

Rural

Large scales of analysis with few legal and physical impediments in less fragmented landscapes.



Urban

Small scales of analysis with many legal and physical impediments in highly fragmented landscapes.



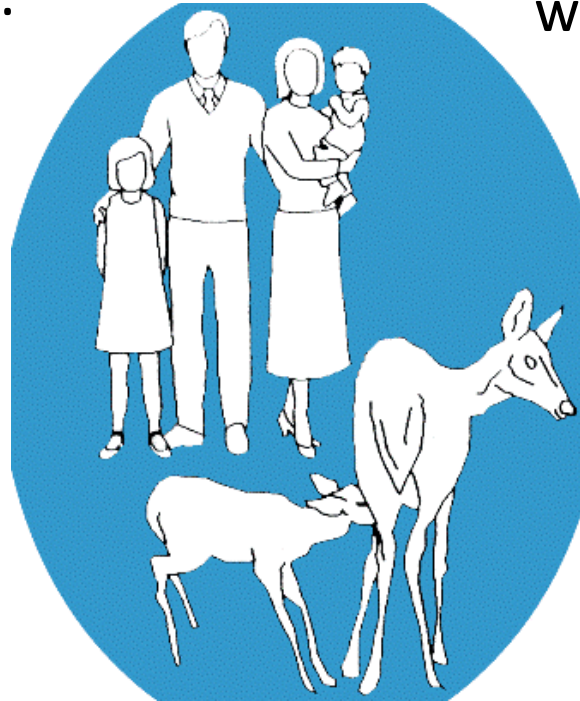
Differences: Number 6

Rural

Requires less training and experiences in the human dimensions of wildlife management.

Urban

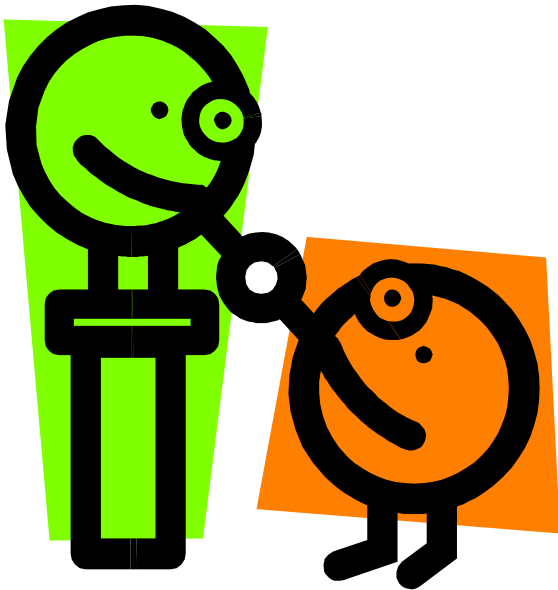
Requires extensive training and experience in the human dimensions of wildlife management.



Differences: Number 7

Rural

Wide academic and agency acceptance and participation.



Urban

Limited academic and agency acceptance and participation.



Differences: Number 8

Rural

Residents have a more homogeneous set of attitudes and expectations related to wildlife management.



Urban

Residents have a more heterogeneous set of attitudes and expectations related to wildlife management.



Differences: Number 9

Rural

Low public demand for inclusion in the management process.

Urban

High level of public demand for inclusion in the management process.



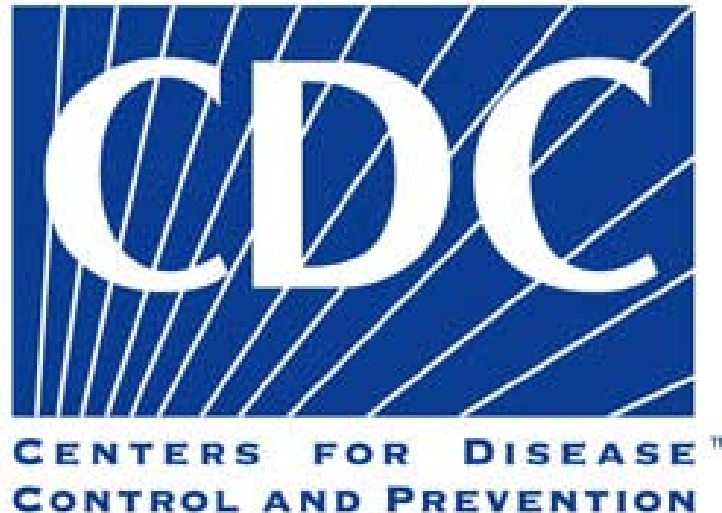
Differences: Number 10

Rural

Lower potential for threat to public health from zoonotic diseases and parasites.

Urban

Higher potential for threat to public health from zoonotic diseases and parasites.



Differences: Number 11

Rural

Management to sustain
artificially abundant wildlife
populations

Urban

Management to reduce
artificially abundant wildlife
populations.



Differences: Number 12

Rural

Majority of management efforts coordinated through state or federal agencies.



Urban

Growing trend toward privatization and commercialization of wildlife management.



Differences: Number 13

Rural

Significantly shorter time frame for completion of management activities.



Urban

Exaggerated time frame for completion of management activities.



Differences: Number 14

Rural

Managers have required training in wildlife management.



Urban

Managers may not have required training in wildlife management.

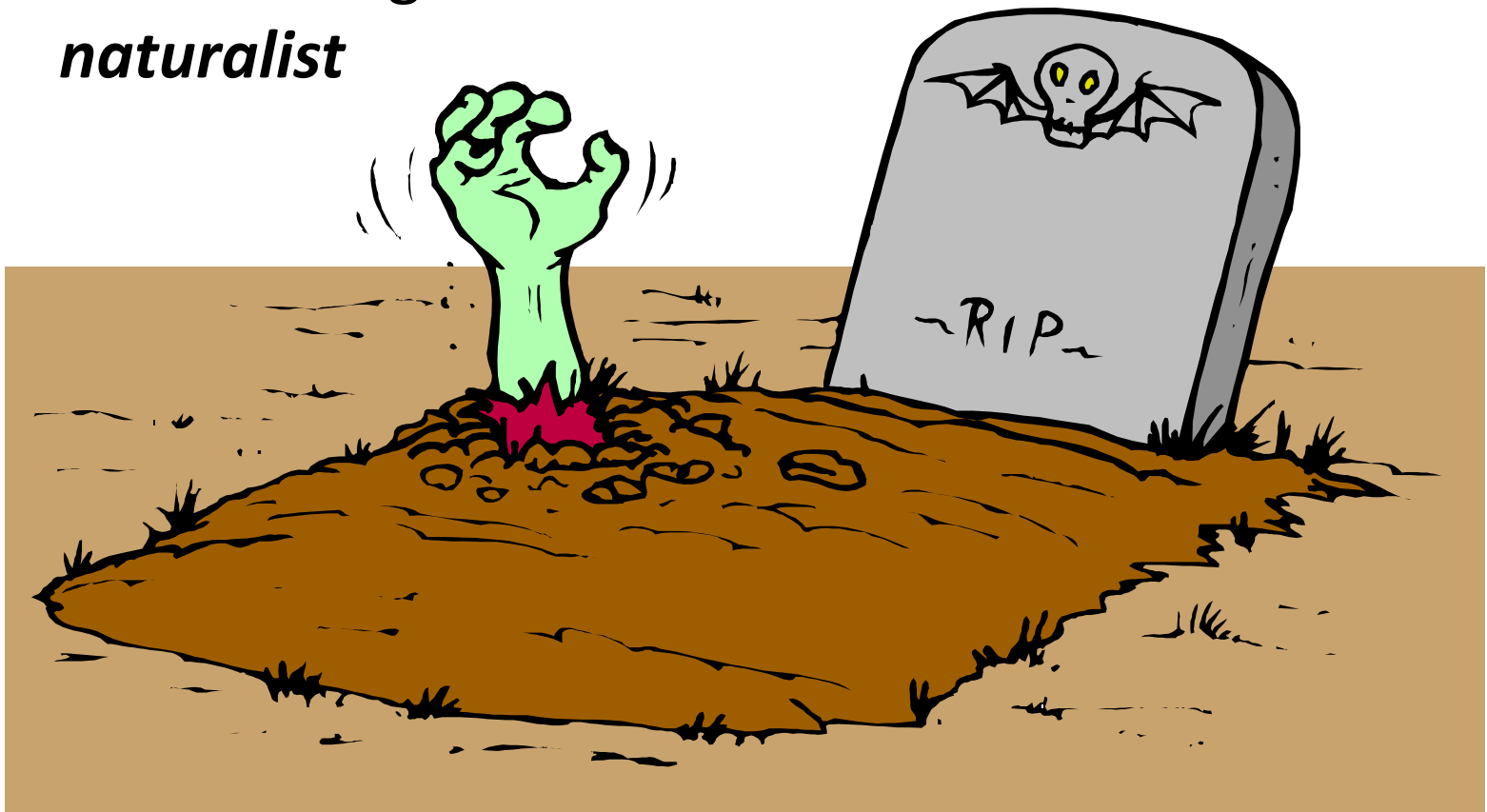


Building and Infrastructure for Urban Wildlife Management

1. Curriculum
2. Textbook

A Curriculum to Train Urban Wildlife Biologists

- Resurrecting the *naturalist*



Curriculum Components

- Taxonomy and natural history
- Urban land use planning
- Environmental education/interpretation
- Fish and wildlife law and administration
- Human dimensions of natural resource management
- Conflict resolution



Urban Wildlife Management

Second Edition



Clark E. Adams • Kieran J. Lindsey

 CRC Press
Taylor & Francis Group

Textbook Themes

- Urban Landscapes
- Urban Ecosystems
- Urban Habitats and Hazards
- Sociopolitical Issues
- Special Management Considerations

Textbook Topics

1. Introduction – A New Wildlife Management Paradigm
2. The Changing Landscape of Wildlife Management
3. Ecosystem Principles in the Urban Context
4. Urban Soils
5. Urban Waters
6. Principles of Population Dynamics

Textbook Topics

7. Urban Green Spaces
8. Urban Gray Spaces
9. Human Dimensions in Urban Wildlife Management
10. The Stakeholder Approach and Urban Wildlife Management

Textbook Topics

11. Legal Aspects of Urban Wildlife Management
12. Ecology and Management Considerations of Selected Species
13. Zoonoses and Management Considerations
14. Resident Canada Geese and Urban White-tailed Deer

Why We Wrote the Book

- A synthesis of the literature was needed.
- A textbook on Urban Wildlife Management Course was missing and needed
- Someone had to “Tell the rest of the story.”

Dedication

- All those individuals, organizations, and agencies who are on the front lines attempting to address urban wildlife management problems. They represent the unsung heroes of wildlife management receiving little recognition and/or acceptance of the contributions they are making to a growing wildlife management phenomenon. They are the futurists involved in the cutting edge aspects of human/wildlife interactions in urban environments.

Dedication in Brief

- All those who realize that urban wildlife management goes beyond controlling raccoons in garbage cans.



In Summary

1. UWM is a contemporary expression of human involvement with wildlife.
2. The UWM discipline encompasses far more than raccoons in garbage cans, ADC, or techniques.



Acknowledgements

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