



GREEN GROWTH TOOLBOX

Wildlife & Natural Resource Stewardship in Planning



Black-crowned night heron

Building Local Government Capacity for Landscape Scale Biodiversity Conservation



What is the Green Growth Toolbox?

A non-regulatory guide and technical assistance program for integrating priority wildlife habitat conservation in local government land use planning.



Contributors and Partners

The slide displays a collection of logos for various organizations. The logos include: 'sustainable SANDHILLS' with a leaf icon; 'NORTH CAROLINA SANDHILLS CONSERVATION PARTNERSHIP' in a circular orange logo; 'NORTH CAROLINA COASTAL LAND TRUST' in a blue banner; 'NORTH CAROLINA Natural Heritage Program' with a plant illustration and the tagline 'SCIENCE GUIDING CONSERVATION'; 'Audubon NORTH CAROLINA' with a bird icon; 'Land-of-Sky Regional Council' with a mountain range icon; 'NORTH CAROLINA NONGAME & ENDANGERED WILDLIFE FUND' featuring a cardinal; 'FEOP' in large red letters with a leaf illustration; 'STATE WILDLIFE GRANTS' with icons of a bird, paw print, and fish, and the text 'INVESTING IN WILDLIFE SINCE 2000'; 'WILDLIFE CONSERVATION SOCIETY' in a green box; and the 'U.S. FISH & WILDLIFE SERVICE' seal.

Overview

- Purpose: Proactive wildlife & habitat conservation in planning
- Background
- Components of the Green Growth Toolbox
- Focus on maintaining healthy ecosystems for people & nature
- Outcomes
- Ideas for collaboration



The Purpose of the Green Growth Toolbox

- Alternative to under-funded acquisition strategy
- To minimize impacts
- To maintain habitat connectivity & the ability to manage habitats
- To implement the NC Wildlife Action Plan



Bridging the Gap Between Wildlife Biologists & Land Use Decision Makers

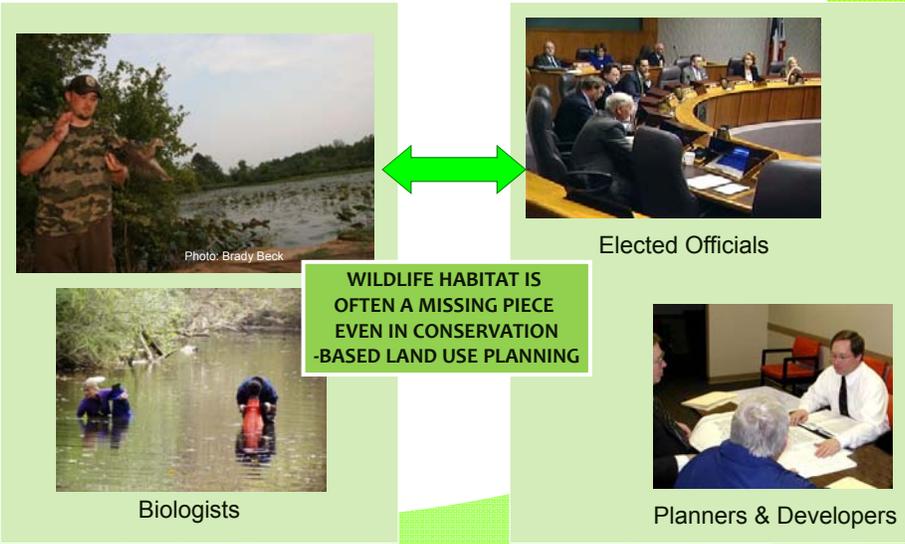


Photo: Brady Beck

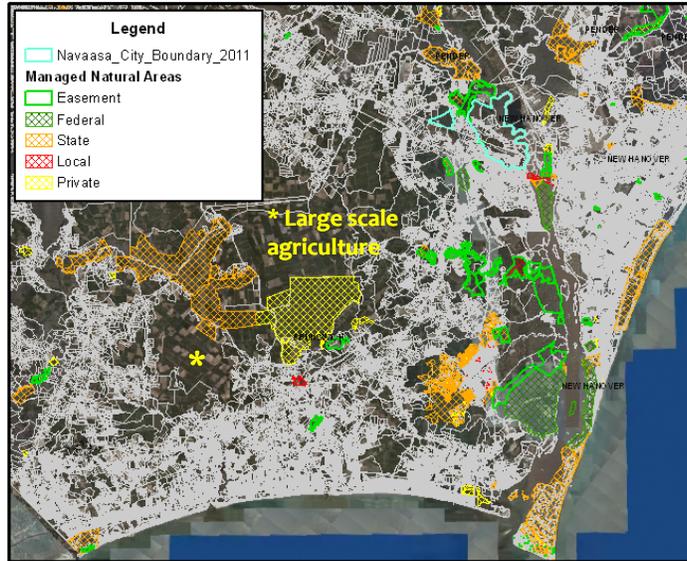
Elected Officials

Biologists

Planners & Developers

WILDLIFE HABITAT IS OFTEN A MISSING PIECE EVEN IN CONSERVATION-BASED LAND USE PLANNING

Development in the Southeast Coast of NC



The Status of Biodiversity in North Carolina

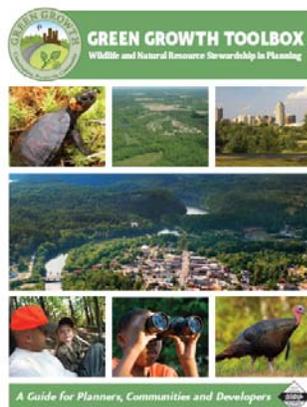
- Over 370 species are of concern.
- 38 animals are **federally endangered or threatened**
- 101 animals are **state endangered or threatened**
- 125 are **species of special concern** at the state level
- 8 of the 21 most endangered US ecosystems





Green Growth Toolbox Handbook

6 Components



1. Justification & Benefits
2. Using Conservation Data
3. Recommendations
4. Green Planning
5. Greening Incentives & Ordinances
6. Greening Development Location, Review & Design
 - Links to case studies & examples



Green Growth Training Workshops

- County, municipal & transportation planners & officials
- GIS & other departments
- Leaders
- Landowners
- Developers
- Consultants
- Provide AICP credits

Train the Trainer Workshops



Technical Assistance to Local Governments & Communities



- One on one assistance
- Recommendations & mapping:
 - Land use & other plans
 - Incentives & ordinances
 - Development review & site design

Green Growth Toolbox Implementation



- > 200 land use planners & local government staff trained in workshops tailored to the community.
- 50 counties, towns and cities
- Over 25 communities have incorporated priority wildlife habitat in land use planning projects.

Green Growth Toolbox Handbook



A Guide for Planners, Communities and Developers

6 Components

1. Justification & Benefits
2. Using Conservation Data
3. Recommendations
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SECTION 1 : WHY GREEN GROWTH ?



Top Ten Benefits of Green Growth

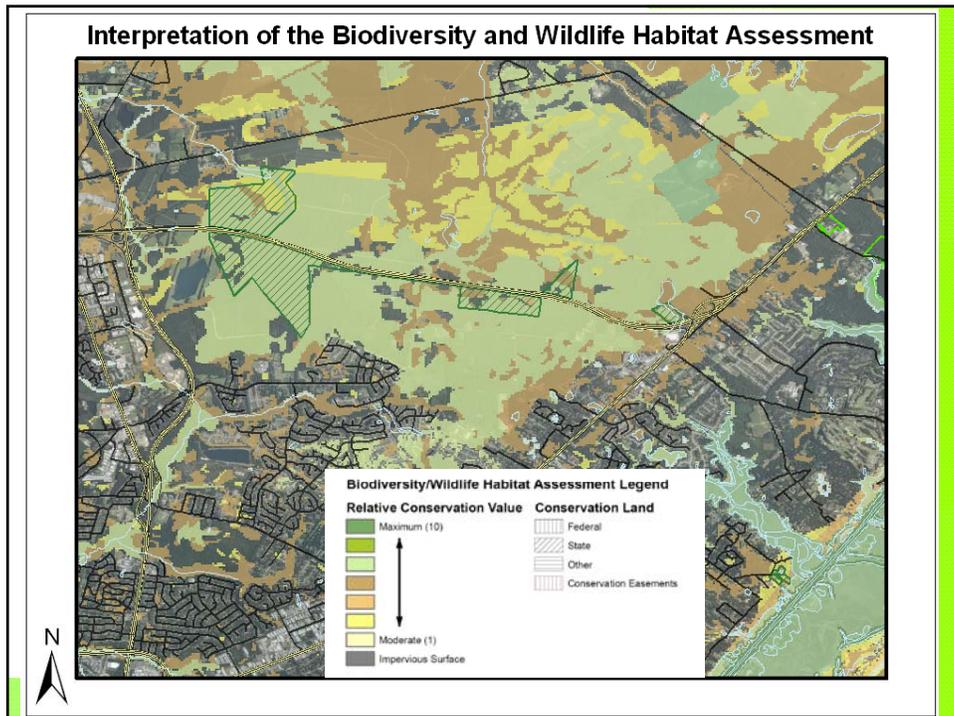
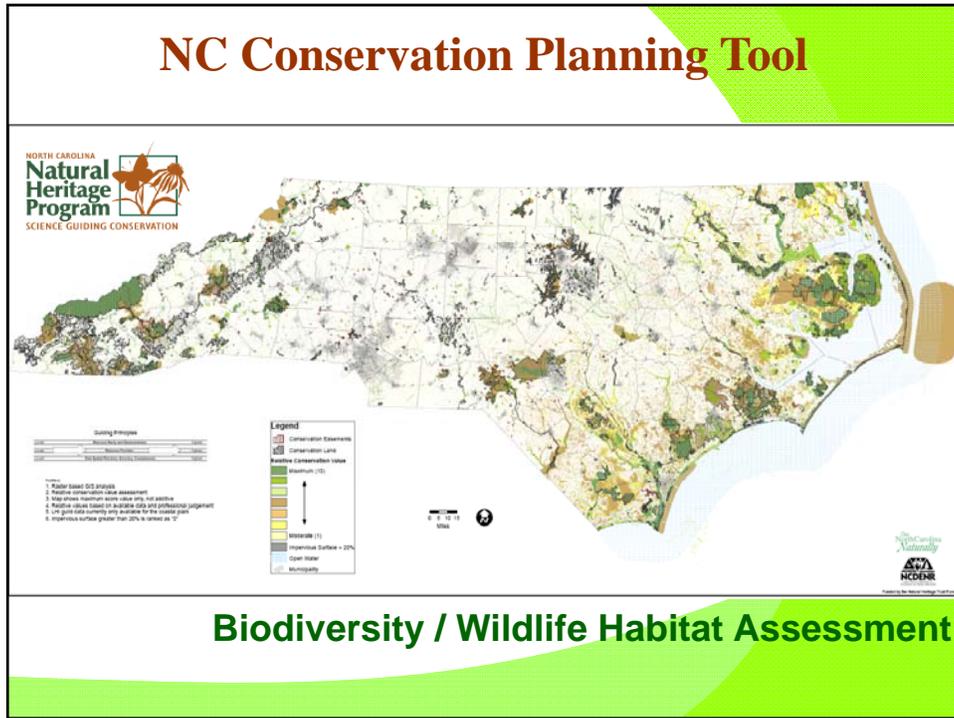
1. Better health all around	6. Increase prosperity
2. Economic returns	7. Generate tourist income
3. Environmental safeguards	8. Reduce costs to taxpayers & local governments
4. Avoid environmental conflicts	9. Respond to public demand
5. Attract new economy businesses	10. Improve quality of life

Referenced from > 60 peer-reviewed articles



SECTION 2: CONSERVATION DATA





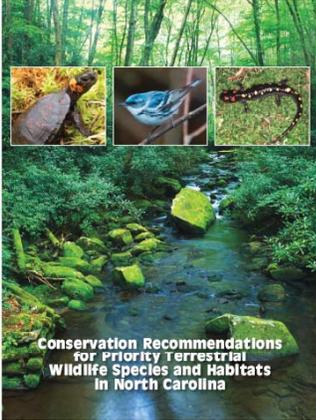
SECTION 3: HABITAT CONSERVATION RECOMMENDATIONS

Green Growth Toolbox Science Delivery

Summary of the scientific literature

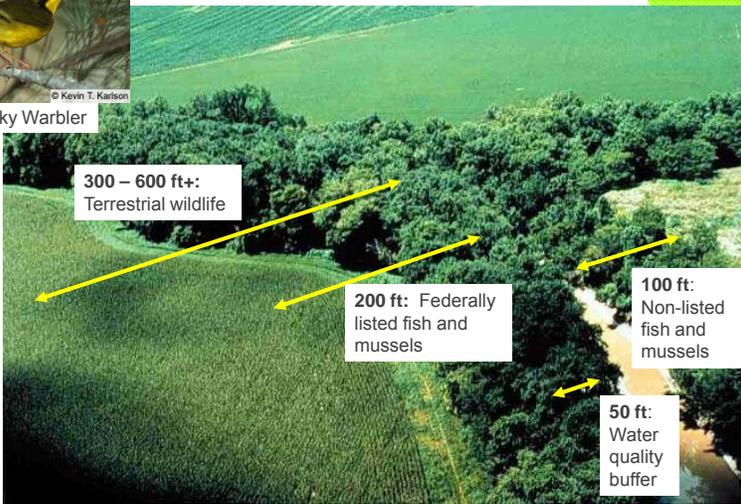


NCWRC Recommendations



Conservation Recommendations
for Priority Terrestrial
Wildlife Species and Habitats
in North Carolina

Stream Buffers, Wildlife Corridors & Greenways



300 – 600 ft+:
Terrestrial wildlife

200 ft: Federally
listed fish and
mussels

100 ft:
Non-listed
fish and
mussels

50 ft:
Water
quality
buffer



© Kevin T. Karlson
Kentucky Warbler



ACHIEVING GREEN GROWTH

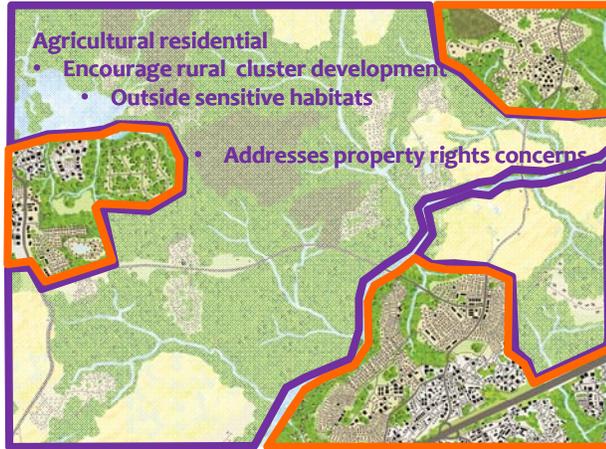
SECTION 4: GREEN PLANNING



- Enable wildlife & habitat conservation through vision, goals & strategies
- Create a wildlife habitat conservation plan or section
- Integrate habitat conservation into all plans
- Links to case study plans

USFWS
Worm eating warbler

SECTION 5: GREENING INCENTIVES & ORDINANCES



Graphic developed by Echo 3 Creative, Star NC  Urban Service Area

Ordinances reduce barriers to:

- Development clustering
- Stream & wetland buffers
- Habitat connectivity & management
- Example ordinances from NC & US

Incentive case study: Florida

- Landowner created – different than TDR – credit trading



THE RURAL LANDS STEWARDSHIP PROGRAM
 A NEW APPROACH TO LAND PROTECTION
 Based on a successful state program (chapter 163.3177(11)(d), Florida Statutes)





SECTION 6: GREENING DEVELOPMENT REVIEW & SITE DESIGN



(Linda Fitzgerald)

- Standard use of conservation data to review development proposals
- Applying habitat conservation principles to site design

Ideas for Collaboration

- **Topic areas addressed by the GGT**
 - Ecosystem & wildlife conservation in planning
 - Economic benefits
 - Planning
 - Policy & Incentives
 - Design



◎ Mountains

- Land of Sky Regional Council
 - Buncombe County
 - Madison County
 - GroWNC
- Isothermal COG
 - Polk County

Use of the GGT

Chestnut-sided Warbler

[Linking Land & Communities Project Information](#)

Legend Information

- Map
- Land of Sky Boundary
- Conserved Lands
- Green Infrastructure Corridors
- Combined Resource Hubs
- Agriculture Assessment
- Water Quality Assessment
- Wildlife Habitat and Biodiversity Assessment
 - High : 10
 - Low : 1

● Coastal Plain

- Lake Waccamaw
- Boiling Springs Lakes
- Burgaw
- Navassa ^{LUP, O}
- Bladen County
- Onslow County
- Cape Fear Council of Government
- NC Division of Community Assistance

Use of the GGT

