GREEN GROWTH TOOLBOX
Wildlife & Natural Resource Stewardship in Planning

Building Local Government Capacity for Landscape Scale Biodiversity Conservation

Black-crowned night heron

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

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

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

Elected Officials

Planners & Developers
Projected Housing Density

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

**Legend**
- Brunswick County Parcels
- Dissapearing wetlands and forests
- Parcel boundaries
- Large scale agriculture
Beginnings, 2009

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.

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SECTION 1: WHY GREEN GROWTH?

Top Ten Benefits of Green Growth

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

Referenced from > 60 peer-reviewed articles

SECTION 2: CONSERVATION DATA
NC Conservation Planning Tool

Biodiversity / Wildlife Habitat Assessment

Interpretation of the Biodiversity and Wildlife Habitat Assessment
SECTION 3: HABITAT CONSERVATION RECOMMENDATIONS

Green Growth Toolbox
Science Delivery

Summary of the scientific literature

NCWRC Recommendations

Stream Buffers, Wildlife Corridors & Greenways

- Kentucky Warbler

- 100 ft: Non-listed fish and mussels
- 200 ft: Federally listed fish and mussels
- 300 – 600 ft+: Terrestrial wildlife
- 50 ft: Water quality buffer
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
SECTION 5: GREENING INCENTIVES & ORDINANCES

Ordinances reduce barriers to:
- Development clustering
- Stream & wetland buffers
- Habitat connectivity & management
- Example ordinances from NC & US

Agricultural residential
- Encourage rural cluster development
- Outside sensitive habitats
- Addresses property rights concerns

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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(1)(a), Florida Statutes)
SECTION 6: GREENING DEVELOPMENT REVIEW & SITE DESIGN

- 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
Use of the GGT

**Piedmont**
- Chatham County
- Raleigh
- Cary
- Anson County
- Montgomery County
- Stanly County
- Asheboro
- Lincoln County
- Kerr-Tarr COG and RPO
- Piedmont Triad Regional Council
- Triangle J Council of Governments
- Durham Long Range Transportation
- Pittsboro
- Davidson County

**Sandhills**
- Moore County
- Harnett County
- Southern Pines
- Aberdeen
- Fayetteville
- Fort Bragg Regional Alliance
- Bladen County
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