

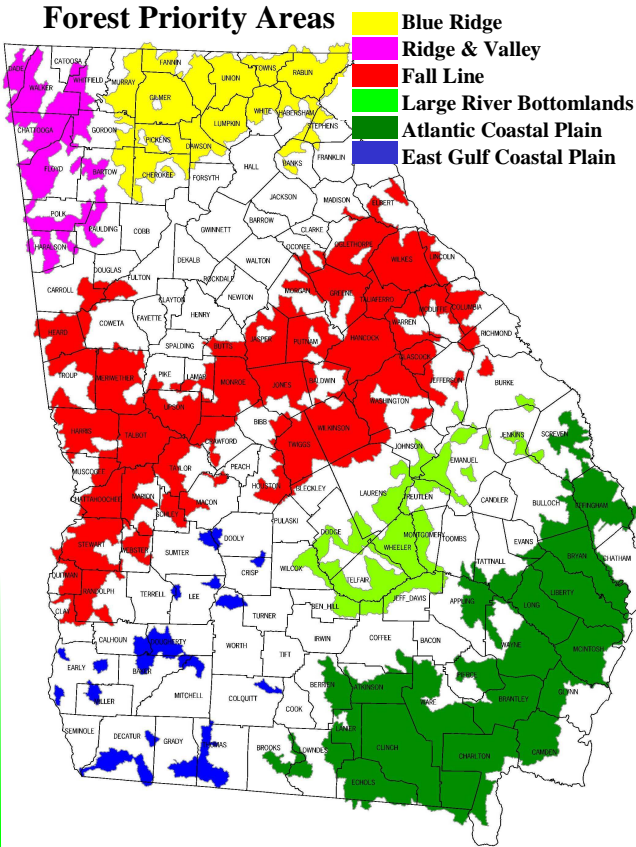
Priority Conservation Landscapes in Georgia



NRCS Natural Resources Conservation Service

Aiming for Sustainable Ecoregions & Their Habitats

The Forest Stewardship Program is designed to help private landowners manage their natural resources with a written management plan that integrates & focuses their objectives of sustaining quality native timber, native wildlife populations, soil & water resources, aesthetics, & recreation. Plans prescribe select conservation practices for specific areas of land. These plans are important in helping to provide quality information & services for landowners to meet their objectives & to restore & maintain the health of Georgia's 24 million forested acres.



GEORGIA STATEWIDE FOREST RESOURCES ASSESSMENT & STRATEGY

The Georgia Forestry Commission (GFC) solicited input from 60+ landowners & stakeholders to identify forestry concerns & developed a published strategy in 2010. With direction from the US Department of Agriculture's Farm Bill, Forest Service, & the National Association of State Foresters, partnering University of Georgia used the information gathered & analyzed statewide land use changes. By comparing forest changes through satellite images & land cover maps, priority areas were identified to restore & maintain forests that need the most critical attention.

Forest Issues & Threats Ranked Most Important

- | | |
|-----------------------------|----------------------------------|
| 1) Water quality & quantity | 5) Air quality |
| 2) Urbanization | 6) Fire management |
| 3) Forest Health | 7) Fragmentation & parcelization |
| 4) Biodiversity | 8) Economics & changing markets |

THREE STATE & NATIONAL PRIORITIES That Summarize 126 Strategic Actions Needed

1. Conserve Working Forest Landscapes
2. Protect Forests from Harm
3. Enhance Public Benefits from Trees & Forests

Visit www.gatrees.org to view the entire strategy, as well as information about forest management & services available.

GEORGIA STATE WILDLIFE ACTION PLAN

Conservation Themes that Summarize 78 Actions Needed

1. Increase use of prescribed fire for habitat restoration.
2. Improve wetland protection & mitigation methods.
3. Provide technical & financial assistance for private landowners to voluntarily apply wildlife conservation practices on their property.
4. Develop state strategy for invasive exotic species control.
5. Facilitate land protection efforts like the Georgia Land Conservation Program.

Visit www.georgiawildlife.com to view the entire plan, as well as detailed information about services, wild animals, plants, & communities of concern, & for a list of those closest to you.

Although Georgia is one of the most biologically diverse states in the nation, 318 species here have such low populations that state or federal laws protect them. Hundreds of others are of conservation concern as well, mostly due to habitat degradation & destruction. After identifying species & habitats most at risk, Georgia Department of Natural Resources (GADNR) staff in partnership with over 60 organizations from state & federal agencies, non-governmental agencies, as well as land managers & others explored methods for recovery & restoration. After three years of careful planning, the US Fish & Wildlife service approved GA's State Wildlife Action Plan in 2005 which prioritized 78 actions to address conservation needs of these species & habitats. From this list, 5 major conservation themes were identified as crucial for maintaining our state's foundation of healthy ecoregions & their biological diversity.





Cumberland Plateau manage hardwoods, riparian buffers, plant native grass/shrub/trees, & filter strips.

Dawson Forest/Upper Etowah manage hardwoods, riparian buffers, plant native grass/shrub/trees, & filter strips.

Paulding Forest/Dugdown Mountain/Tallapoosa River restore Montane longleaf pine, hardwood management, riparian buffers, & plant native grass/shrub/trees.

Ocmulgee River Corridor manage hardwoods, riparian buffers, plant native grass/shrub/trees, & field borders.

Southwest GA Longleaf Pine restore longleaf pine, field borders, riparian buffers, filter strips, plant native grass/shrub/trees, & early successional habitat.

Altamaha River Corridor restore longleaf pine, early successional habitat, manage hardwoods, riparian buffers, plant native grass/shrub/trees, & field borders.

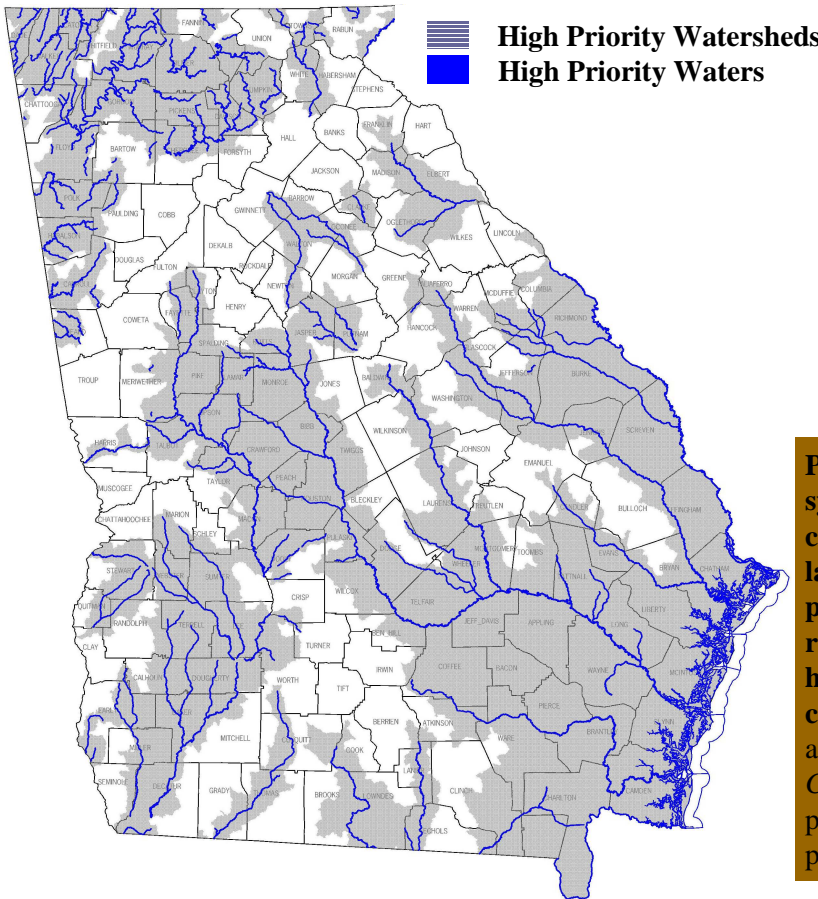
RESTORE HIGH PRIORITY AREAS, WATERSHEDS, & STREAMS OF GEORGIA FORESTS

Is Your Land Within Georgia's High Priority Areas or Watersheds? Georgia has many forest issues & threats. So many for so long, in fact, that our ability & resources to correct them now are too limited. This is why it is important for our conservation efforts to be focused. For example, implementing the conservation practices described in the priority areas on this map would improve forest conditions like water quality & quantity in many of our 70,000 miles of streams.

Economic growth & development in Georgia have resulted in significant changes to wetland habitats- www.georgiawildlife.com/node/1377

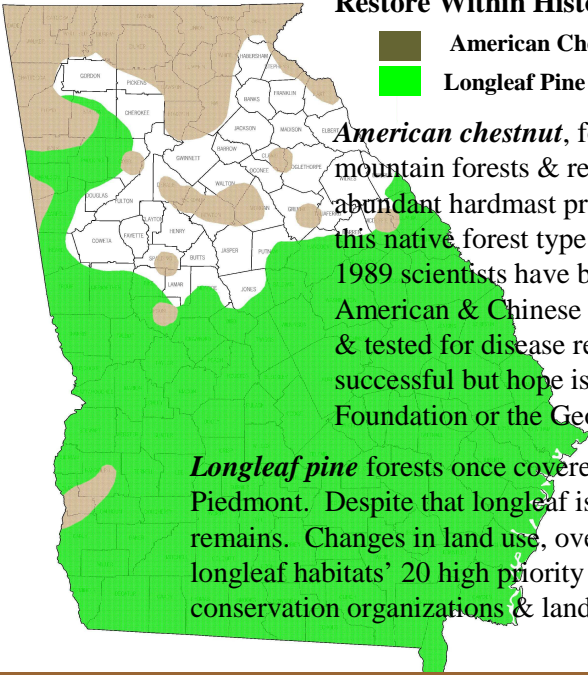
According to data from GADNR's Environmental Protection Division, 25% of Georgia's 11,359 miles of monitored streams did not support designated uses due to impaired water quality. The causes of these hydrologic alterations vary among regions. They include construction of hydropower dams, water reservoirs, other impoundments, stream channelization, drainage of wetlands by ditches or tiles, & withdrawal of groundwater & surface water. In the Blue Ridge ecoregion, 24% of streams did not support designated uses, while 83% did not in the Southern Coastal Plain. These activities impact a wide variety of species in areas much larger than the footprint of a construction area. For example, dams placed on major rivers impact wetland systems miles up & downstream, altering instream flows, changing water quality, & isolating wild aquatic populations.

Point & non-point source pollution of aquatic systems resulting from unbounded residential, commercial, & industrial development, as well as lack of sufficient & appropriate conservation practices within agricultural operations, are reasons why these locations are designated as high priority & create unnecessary longterm costs. The good news is that aquatic, terrestrial, & air pollution can be controlled or eliminated using *Conservation Practices* of GANRCS & GFC when prescribed by a team of integrated natural resource professionals. See last page for details.



Restore Within Historic Range

- American Chestnut
- Longleaf Pine



American chestnut, for example, was the dominant tree species within our Appalachian mountain forests & reached through surrounding states. It was valuable for timber & abundant hardwood preferred by many wildlife species & people. Over 200 million acres of this native forest type were killed by an imported chestnut blight by the mid-1900s. Since 1989 scientists have been working to develop a disease resistant tree by cross breeding the American & Chinese chestnuts. Trees that are 94% American chestnut are now being planted & tested for disease resistance & growth form. It is too early to tell if these seedlings will be successful but hope is high. To learn more about restoration, contact the American Chestnut Foundation or the Georgia Forestry Commission liaison at sgriffin@gfc.state.ga.us.

Longleaf pine forests once covered about 92 million acres of the Southeast in mostly the Coastal Plain & Piedmont. Despite that longleaf is very valuable for timber & wildlife habitats, only 3% of this area remains. Changes in land use, overharvest, & lack of restoration have caused significant declines of longleaf habitats' 20 high priority animals & 56 high priority plants in GA. Fortunately, many conservation organizations & landowners are informing others & reforesting longleaf in its native range.

RESTORE NATIVE TREES TO GEORGIA FORESTS

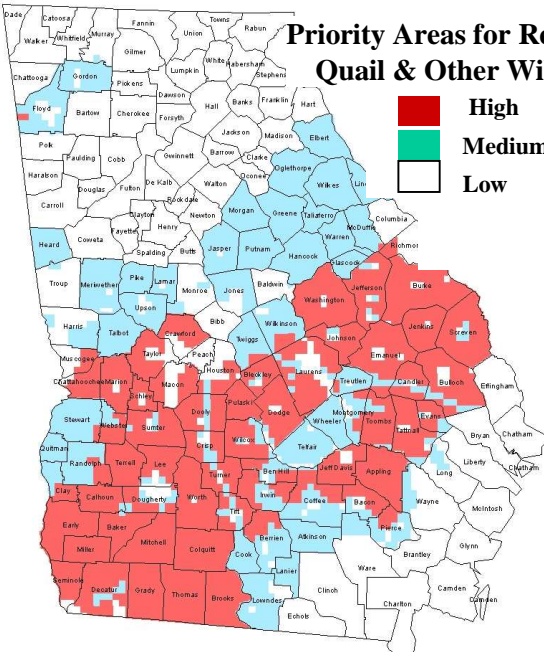
Visit www.longleafalliance.org to learn about longleaf pine forests & the Longleaf Alliance.

Visit www.acf.org & to learn about American chestnut forests & The American Chestnut Foundation.



Priority Areas for Restoring Quail & Other Wildlife

- High
- Medium
- Low



RESTORE NATIVE PLANTS TO GEORGIA FORESTS

The *GA Statewide Forest Resources Assessment & Strategy* as well as the *GA State Wildlife Action Plan* have found that our state's forests are suffering tremendous alterations & are in need of restoration. A healthy forest that wildlife need contains (1) native overstory trees, mid-story trees, & an understory plant community of shrubs, herbaceous plants, & grasses that form a vertical structure, (2) different ages & types of forests that are next to each other forming a horizontal structure, & (3) forest landscapes large & free enough from unnatural pressures such as unbounded development, intensive agriculture, or violations of forestry Best Management Practices.

For example, priority restoration areas for bobwhite quail & dozens of other native wildlife & plant species have been identified by the National Bobwhite Conservation Initiative. To survive, they need quality understory plant communities like what is often found in well managed upland longleaf pine forests. Biologists with GA's Bobwhite Quail Initiative Program & other biologists here & from 35 states where quail are native developed a plan to try & reverse the drastic 70% decline in quail populations since the late 1960s. To restore a viable population of quail in a pine forest, what is needed are frequent thinnings, 1-2 year fire rotations, & 2,500-5,000+ contiguous acres of this habitat type.

Visit www.georgiawildlife.com/node/2210 to learn how to restore quail & other wildlife with native understory plant communities known as early successional habitat.



**HOW TO RECEIVE QUALITY
TECHNICAL & FINANCIAL ASSISTANCE**
~ Prescriptions For Restoring Georgia's Forests ~

The Natural Resource Conservation Service, Georgia Forestry Commission, & Georgia Department of Natural Resources-Wildlife Resources Division provide substantial technical & financial assistance to owners & managers of private non-industrial forest lands through many conservation programs. Most conservation programs are re-authorized every 5 years through US Department of Agriculture's Food Conservation & Energy Act, while several more are offered through other agencies, departments, & conservation organizations. Many of these are summarized in the *Landowner's Guide to Conservation Incentives* viewable at www.georgiawildlife.com

When it comes to meeting your land management objectives & restoring habitats for wildlife, what is most important is receiving quality prescriptions from natural resource professionals for which conservation practices, not programs, to implement when & where.

For all purposes when implementing any conservation practice, aim to maintain sustainable ecoregions by establishing a variety of native-only plant & tree species, & where invasive-exotic plants exist eradicate them prior to restoring native plant communities.

For landowners & managers interested in producing timber & other agricultural products, increasing quality habitats for wildlife, conserving soil & water, & enhancing recreation & aesthetics, all while using responsible conservation methods, are likely to be eligible to receive both technical & financial assistance.

CONSERVATION PROGRAMS

For technical & financial assistance, read *Landowner's Guide to Conservation Incentives* at www.georgiawildlife.com & call your local conservation agency office using its directory. Examples...

- (1) **Types of Written Technical Assistance** include Forest Stewardship, Conservation, Bobwhite Quail Initiative, or Habitat Conservation Plans.
- (2) **Financial Assistance Programs to Install Conservation Practices**
Natural Resource Conservation Service www.ga.nrcs.usda.gov/programs
Georgia Forestry Commission www.gatrees.org
- (3) **Financial Assistance to Conserve Land**
Conservation easement or Fee-simple sale

CONSERVATION PRACTICES

Conservation practices are management actions needed to improve forest & other natural resources while helping you meet your objectives. Visit www.gatrees.org of the Georgia Forestry Commission for Forestry Best Management Practices & www.ga.nrcs.usda.gov/technical of the Georgia Natural Resource Conservation Service for details.

**NRCS CONSERVATION
PRACTICES & CODES**

Forest Area Management

- Prescribe burning (338, 645)
- Fire break (394)
- Brush & weed management (314, 315)
- Bermuda, fescue, & Bahia grass eradication
- Early successional habitat (647, 644)
- Forest stand improvement (666)
- Longleaf pine & native understory restoration
- Upland wildlife habitat (645)
- Restore & manage declining habitats (643)
- Riparian forest buffer (391, 645)
- Forest site preparation
- Tree/shrub site preparation (490)
- Tree/shrub establishment (612)
- Conservation cover (327)
- Deep tillage (324)
- Forest trails & landings (655)
- Forest wildlife opening (645/647 use FSP criteria)
- Critical area planting (342)
- Structure for water control (587)
- Use exclusion (472)

Wetland Area Management

- Stream habitat improvement & management (395)
- Stream crossing (578)
- Streambank & shoreline protection (580)
- Stream channel stabilization (584)
- Shallow water development & management (646)
- Wetland creation (658)
- Wetland enhancement (659)
- Wetland restoration (657)
- Wetland wildlife habitat (644)
- Constructed wetland (656)
- Fish pond management (399)
- Pond (378)

Haying, Grazing, & Livestock Area Management

- Native warm season grasses (644)
- Rotational & carrying capacity grazing
- Fence construction to exclude livestock (382)
- Hedgerow (422, 645)
- Field border (386)
- Prescribed grazing (528)
- Terrace (600)

Cultivated Agricultural Area Management

- Riparian herbaceous cover (390)
- Filter strip (393, 645)
- Field border (386, 645)
- Conservation cover (327)
- Hedgerow (422, 645)
- Early successional habitat (647, 644)
- Contour buffer strips (332)
- Contour farming (330)
- Conservation tillage or Residue mgmt (329)
(no-till/strip till, mulch till, ridge till, seasonal)
- Conservation crop rotation (328)
- Cover crop (340)
- Grassed waterway (412)

