



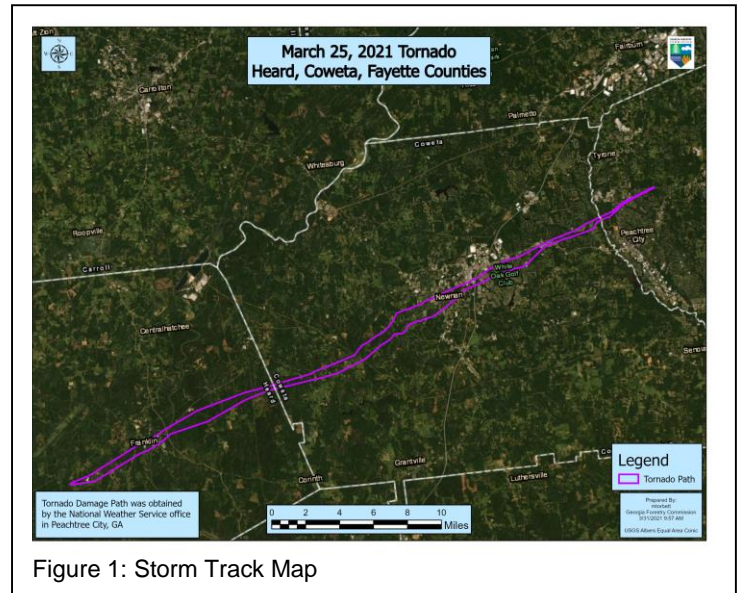
TIMBER IMPACT ASSESSMENT

Heard - Coweta County Tornado, March 25-26, 2021

By: Jeff Sibley and Scott Griffin - Georgia Forestry Commission
(jsibley@gfc.state.ga.us, sgriffin@gfc.state.ga.us)

BACKGROUND

The National Weather Service (NWS) determined an EF-4 tornado crossed Heard, Coweta, and Fayette Counties in the late hours of March 25, 2021 and into the early hours of March 26, 2021. The tornado touched down at approximately 11:37 PM EDT, west of Franklin, Georgia, ending at approximately 12:30 AM EDT just north of Peachtree City, Georgia. The tornado traversed across wooded land, pastures and residential areas, causing damage. Damage included uprooted and broken trees, along with damage to many dwellings, utility buildings and commercial properties. Significant damage began in close proximity to GA-34 and US-27 and continues on a north eastern path through Coweta and western Fayette County. Areas of significant timber damage include Franklin to the Coweta County line, and J.D, Walton Road to I-85 in Coweta County. The tornado reached a width of 0.5 miles just east of US-27 and south of GA-34 to one-mile-wide just before reaching the city of Newnan, blowing over and snapping off trees at their base. One citizen fatality was reported.



OBSERVATIONS

Georgia Forestry Commission field foresters surveyed the primary zones impacted by the tornado using aerial and ground observations. The tornado touched down west of Franklin, Georgia, causing light damage to pine and hardwood areas. As the tornado continued east through Franklin and south of GA-34, it intensified, causing moderate to severe damage to pine and hardwood timber. Approaching the Coweta County line, the tornado intensity decreased, causing sporadic light to moderate damage along the upper elevations, in an east to northeast path. The tornado continued to travel northeast once again, increasing in intensity approaching Mountain Creek and Smokey Road, causing moderate to severe damage through Newnan, Georgia. Once the tornado reached I-85 it once again decreased in intensity, causing sporadic light to moderate damage in a northeast direction until phasing out just north of Peachtree City, Georgia. Overall, the Timber Impact Assessment revealed a wide degree of timber damage, from residential trees to mature managed forest.

Figure 2: Holbrook Road



Figure 3: Victoria Lane



Tornado-impacted areas had predominantly trees snapped, with some uprooted trees. In addition to pine timber being snapped and uprooted, hardwood timber was also destroyed. Most of the hardwood damage was primarily located within Streamside Management Zones (SMZs), drains or mixed pine/hardwood timber stands.

EXTENT OF DAMAGE

Rural Timber Assessment

Georgia Forestry Commission foresters developed estimates of timber damage acreage and value. These estimates do not include areas outside the primary tornado path, areas of minimum damage or urban areas. The chart below displays the timber damage by county and timber type.

County	Damage level	Pine Timber (Acres)	Pine Timber Value	HDWD-HDWD/Mix (Acres)	HDWD Timber Value	Acres Needing Reforestation	Cost to Reforest
Heard	Moderate-Severe	1427	\$788,357	867	\$704,535	1147	\$286,751
Coweta	Light - Moderate	514	\$113,486	597	\$194,032	222	\$55,527
Coweta	Moderate - Severe	605	\$334,450	734	\$596,741	670	\$167,474
Total		2,546	1,236,293	2,199	\$1,496,307	2,039	\$509,752

Total of 4,745 acres of timber damaged with a total value of \$2,731,600

Overall, there were approximately 7.3 rural square miles affected by the tornado. In addition to the rural areas, many urban trees were destroyed or severely damaged. Without doubt, the landscape within the tornado's path will be changed for a long time. The process of tree waste removal will take months to complete.

In addition to the primary storm paths, visual damage to timber stands could be seen beyond the direct storm path. The majority of timber damage in these areas would be classified as light.

Urban Forestry Assessment

Georgia Forestry Commission staff from the Sustainable Community Forestry Program (SCFP) conducted field assessments to determine the damage to community forests in the city of Newnan. The EF-4 tornado touched down in the city of Newnan, which caused significant to catastrophic damage to the tree canopy in certain residential and commercial areas. Most of this damage was experienced on private property. However, trees on public property within parks, city rights-of-way, government building grounds and particularly around Newnan High School also suffered damage. Preliminary surveys indicate the majority of trees damaged will not be salvageable. Although significant damage to trees in the historic district is also expected, much of this area still remained inaccessible. Further tree risk assessments on public property, with the intent to ensure public safety and determine what trees need to be removed or can remain in the landscape, would appear to be three to four weeks into the future, giving the city time to recover and manage debris removal from streets to allow access and infrastructure repair. Contact with the Mayor and City Arborist is being established to discuss a possible Urban Forest Strike Team deployment when circumstances will allow.

Aerial view of Newnan High School



RECOMMENDATIONS

With the damage inflicted by the EF-4 tornado, there will likely be three distinct categories by which landowners make their evaluations:

- 1) Light damage or losses that may not warrant a salvage operation - This could include merchantable stands (trees are large enough to sell) which simply don't have enough timber damage to warrant a commercial harvest or pre-merchantable stands where there is a good chance they will recover over time. In most of these cases, salvage is not practical and the stand should be monitored for beetle infestations or tree mortality over the next growing season.
- 2) Stands with moderate damage, in which a significant portion of the timber is impacted but some viable trees remain - A decision will have to be made to continue managing the stand through partial salvage or start over with a complete salvage. Landowners are encouraged to use the services of a professional forester to help make the best decision for the situation.
- 3) Stands with severe damage, mandating a salvage operation to recoup whatever value can be obtained - This will include a complete harvest for widespread damage, or a partial harvest of damaged timber to provide a commercial harvest. Salvage operations need to be enacted rapidly before wood degradation occurs. Stem quality is commonly degraded by a tornado through the extreme twisting and snapping of the timber. Stumpage prices will be negatively impacted by this, as well as the difficult logging conditions created by the storm.

For landowners facing a complete harvest to salvage their damaged timber, please consider reforesting the area. Contact your local Farm Service Agency (FSA) about potential cost-share assistance with site preparation and tree planting. Assistance with site preparation and tree planting may be available through the Emergency Forest Restoration Program (EFRP). Apply at your local FSA office USDA – Farm Service Agency.

Heard/ Coweta Residence
408 N. White Street
Carrollton, GA 30117
Office: (770-834-2097)
Fax: (855) 514-3345

Fayette Residents
231 Highway 41 N, Suite C
Barnesville, GA 30204
Office: (770) 358-0787
Fax: (855) 501-2459

Landowners enrolled in the Conservation Reserve Program (CRP) who have damage to the enrolled acreage should report to the Farm Service Agency.

ADDITIONAL PHOTOS



Special thanks to those who helped develop this Timber Damage Assessment:

Michael Torbett- GFC IT/GIS

Zachary Dunning & Justin Mayfield – GFC Foresters

Lynne Womack- GFC Forest Health Coordinator

Joan Scales & Joe Burgess – GFC SCFP

National Weather Service (NWS)

These resources can help forest landowners learn more about options and considerations for situations in which trees have been damaged by severe weather:

TIMBERLAND SEVERE WEATHER DAMAGE:

Wind Wood Utilization (this has numerous documents and links that are beneficial):

<http://www.windwoodutilization.org/salvage.asp>

How to Evaluate and Manage Storm-Damaged Forest Areas:

<http://www.forestpests.org/storm/>

Evaluation and Management of Storm Damage to Southern Yellow Pine

http://www.ncforests-service.gov/Managing_your_forest/pdf/EvaluationMngt-StormDamageSYellowPines.pdf

TIMBER SALES:

Selling Your timber (General Advice)

<http://www.gatrees.org/forest-management/private-forest-management/timber-selling/>

Selling Your Timber

<http://www.gfc.state.ga.us/resources/publications/sellingyourtimber.pdf>

TAXES:

National Timber Tax website (Master Index has good list of subject areas):

<http://www.timbertax.org/>

Landowners are encouraged to utilize professional foresters and arborists to help with decisions about timber management or potentially hazardous trees around homes and urban environments. Seeking independent advice is a sound way to reduce hasty judgments and insure all available options are considered.