2016-17 DROUGHT

FIRE

SOUTHERN MOUNTAINS

Chestnut Knob fire, from NC Forest Service

Factsheet produced by:

NORTH CAROLINA CLIMATEOFFICE

https://climate.ncsu.edu

Summary

A broader drought across the Southeast US expanded into western North Carolina during summer 2016. Fueled by the ongoing hot, dry weather persisting unusually late into the year, the fall fire season was especially active and intense in the southern Appalachians.

Statistics

*For the **southern Mountains***

		Temp.	Precip.	DM
2016	Aug	+3.2°	+0.2"	D0
	Sep	+4.3°	-2.4"	D1
	Oct	+3.8°	-3.3"	D2
	Nov	+4.1°	-2.1"	D3
	Dec	+3.2°	-0.5"	D2
2017	Jan	+6.0°	-0.4"	D2
	Feb	+7.2°	-3.2"	D1
	Mar	+1.0°	-0.0"	D2
	Apr	+5.2°	+2.5"	D1
	May	+0.5°	+2.7"	none

Narrative

Driven by **sustained high pressure over the Southeast US**, the severe drought centered on northern Georgia reached far western North Carolina by mid-summer 2016, but near-normal rainfall in August slowed its eastward expansion.

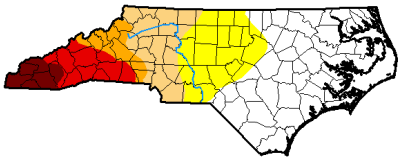
After **three weeks of limited precipitation** to start September, Moderate Drought (D1) expanded across the southern Mountains.

While parts of eastern NC were flooded by Hurricane Matthew, **Asheville recorded just 0.01 inches of rain** from Oct. 9 to Nov. 27.

The Party Rock fire burns near Lake Lure. (Photo from NCFS)

Dead grasses and other vegetation **increased the fuel load** that could be easily ignited by a spark. Between lightning, campfires, and arson, the first sparks began in mid-October.

At least **26 wildfires consumed more than 62,000 acres** in NC, with their spread aided by the ongoing dry weather and several windy days.



US Drought Monitor, Nov. 29, 2016

A **series of cold fronts** beginning in late November brought needed rainfall, and the ongoing fires were largely contained by mid-December.

Drought remained throughout the 2016-17 winter and briefly re-intensified after a dry February, leading to **spotty fires in March**.

A southward-sagging jet stream by late April meant **more storm systems crossing the state**, heavy rain, and the end of drought.

Timeline Legend

*Temp. and precip. departures from 1901-2000 normal in the **southern Mountains**, from the National Centers for Environmental Information.*

DM

*Most common US Drought Monitor category in the **southern Mountains**, by area covered.*

Monthly Temperature Rankings:

Record Coolest	Coolest 10%	Coolest 33%	Near Normal	Warmest 33%	Warmest 10%	Record Warmest

Monthly Precipitation Rankings:

Record Driest	Driest 10%	Driest 33%	Near Normal	Wettest 33%	Wettest 10%	Record Wettest

US Drought Monitor Categories:

D0: Abnormally Dry	D1: Moderate Drought	D2: Severe Drought	D3: Extreme Drought	D4: Exceptional Drought