Alabama Climate Report

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Alabama Office of State Climatologist

The University of Alabama in Huntsville

March 2011

I'm sure many of you remember April 3 of 37 years ago when the nation experienced it's worst tornado outbreak in history. I was in Africa at the time, and this event was front-page news in Nairobi, Kenva.

Right now we are in the center of the most favorable timing for the fiercest tornadoes - the ones that take the most lives in our state: On the NWS list of the 25 deadliest tornadoes in Alabama since 1880, 10 were in March and 10 were in April.

While the April 3, 1974, storms were the worst in U.S. history, they were not the deadliest in Alabama. The state's worst loss of life due to tornadoes was from an outbreak of severe weather on March 21, 1932.

Sixteen tornadoes were reported in Alabama that day: 14 caused fatalities. Seven

of the deadliest tornadoes in Alabama history hit on that day. The total human toll for the day included 268 people killed in Alabama and approximately 1,800 people injured.

That day's deadliest storm - and the worst in state history ~ killed 49 people (including seven in one family) and injured 150 in a 60 mile track from Perry County to Coosa County.

The state was still recovering from that outbreak less than a week later, on March 27, when another half dozen tornadoes hit. Six people were killed and 55 were injured.

The April 3, 1974, outbreak actually began April 1, when three F2 tornadoes from Tuscaloosa to Huntsville killed one person and injured 23 more. Another tornado hit a forest area hear Lanett on April 2.

Ten tornadoes were reported on April 3, including an F5 that stayed on the ground for 135 miles. A NWS report about that tornado said: "An estimated 23 people were killed and 250 were injured in Guin as this damage was possibly the most intense to ever hit Alabama ... Most of Guin was devastated."

That same day, two tornadoes touched down in tracks that were less than half a mile apart in Lawrence, Limestone and Madison counties, killing 50 and injuring 510.

During the April 3 storm, tornadoes killed 82 people in Alabama and injured at least 1,050.

Fortunately, fatality numbers have been dropping through the years thanks in large part to the development of better radars, better weather forecasting tools,

Continued on page 2



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The lawnand-garden moisture index measures the capacity of current soil moisture to sustain healthy lawns and gardens. The index is computed by estimating how much precipitation in the past three weeks contributes to current soil moisture. That rainfall is compared to a "standard" amount of rainfall considered to be adequate for that time of year to sustain healthy lawns and gardens. The difference is the lawn-andgarden moisture index.



	D	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	
Current	52.72	47.28	41.79	16.07	0.00	0.00	
Last Week (03/29/2011 map)	42.07	57.93	41.10	23.51	1.51	0.00	
3 Months Ago (01/04/2011 map)	27.87	72.13	53.79	28.76	1.82	0.00	
Start of Calendar Year (12/28/2010 map)	17.47	82.53	55.26	29.34	1.82	0.00	
Start of Water Year (09/28/2010 map)	3.64	96.36	66.34	25.17	4.40	0.00	
One Year Ago (03/30/2010 map)	100.00	0.00	0.00	0.00	0.00	0.00	



http://drought.unl.edu/dm



National Drought Mitigation Center,

better communication from our media, better community involvement, better home and commercial construction, and an all-around greater respect for the destruction these storms are able to inflict. This reduction in deaths has happened in spite of our growing population.

Even though progress has helped minimize the destructive impact on life and property, these storms are capable of winds in excess of 200 mph, and that still is difficult to protect against.

With my colleagues at the National Weather Service Offices which cover all of the counties in Alabama (Huntsville, Calera, Mobile and Tallahassee), I urge you to purchase a weather radio and be aware when threatening weather might be coming your way.

It is difficult to know how many tornadoes should be expected in a given year. The overall average is about 23 since 1950. However, since 2000 the average has climbed to 60 (http://www.srh.noaa. gov/bmx/?n=tornadorecords.)

The average number has been rising because our detection methods have improved considerably - something for which we are all grateful. Using the latest radar technology, NWS forecasters are able to spot possible tornadoes and mark the area for a site visit within a few days, even if no damage has been reported.

If a tornado hits an unpopulated stretch of forest, is it a tornado? Fifty years ago the answer was likely, "No." Today we are able to say yes more and more.

So, many more eyes and radars are watching out for us, but our safety ultimately depends on our own awareness and action.

John R. Christy, Ph.D. Alabama State Climatologist University of Alabama in Huntsville john.christy@nsstc.uah.edu

Bob Clymer Assistant State Climatologist bob.clymer@nsstc.uah.edu

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Alabama Monthly Climate Summaries March 2011

	March Mean March Norm	March Hi Temp Record Hi	March Low Temp Record Lo	Total Precip. Wettest Marc Normal Prec. Driest March	
Anniston	56.5° 54.9°	84° 3/19/11 89°+ 3/9/74	32° 3/12/11 12° 3/14/93	8.71"18.09"1976.28"1.38"198	
Auburn	58.8° 56.2°	84° 3/19/11 89° 3/27/1910	36° 3/11/11 13° 3/4/43	4.80"17.47"1926.44".69"191	
Birmingham	57.3° 54.5°	84° 3/20, 22/11 89°+ 3/19/82	34° 3/11/11 2° 3/14/93	9.45"15.80"1986.10"1.71"198	
Brewton	60.9° 57.6°	85.6° 3/20/11 91° 3/31/78	31.5° 3/11/11 10° 3/3/80	6.86"15.82"1997.01"2.80"198	
Calera	57.3° 54.2°	84° 3/20/11 88° 3/10/74	33° 3/11/11 9° 3/3/80	8.29" 18.86" 198 6.50" .40" 191	
Clanton	56.7° 54.5°	83.1° 3/20/11 93° 3/25/29	33.3° 3/12/11 10° 3/14/93	9.32"15.88"1976.96"2.27"198	
Courtland	52.7° M	82° 3/20/11 M	30° 3/11/11 M	7.88" M M M	2.15" 3/26/11 M
Cullman	52.8° M	80.8° 3/20/11 M	30.9° 3/29/11 M	11.04" M M M	2.91" 3/9/11 M
Decatur	53.6° 52.4°	83° 3/20/11 93° 3/22/1907	31° 3/2/11 4° 3/7/1899	8.84"11.45"1925.52".65"191	
Dothan	62.1° 59.3°	87° 3/19/11 89° 3/24/1904	36° 3/11,12/11 21° 3/4/43	4.38"16.40"1925.66".42"195	
Fairhope	60.9° 59.8°	79.9° 3/27/11 85°+ 3/10/74	30.6° 3/11/11 21°+ 3/3/80	3.96"11.60"1986.71"2.59"198	
Gadsden	52.2° 52.2°	76.8° 3/22/11 88° 3/11/74	32.0° 3/12/11 11°+ 3/6/60	10.16"17.41"1986.55"1.46"198	
Gainesville	57.8° 54.8°	84.6° 3/20/11 88°+ 3/13/67	34° 3/11/11 15° 3/3/80	8.26"17.26"1975.97"1.57"198	
Greensboro	58.1° 69.9°	85.3° 3/20/11 91° 3/23/95	32.5° 3/11/11 10° 3/14/93	12.35"14.57"1976.51"2.37"198	
Guntersville	54.3° 64.0°	80.2° 3/22/11 87°+ 3/13/90	34.3° 3/12/11 11° 3/3/80	10.53"17.49"1986.20"1.89"197	
Highland Home	59.9° 68.8°	84.2° 3/20/11 88° 3/12/55	36° 3/11/11 14° 3/3/80	6.61"13.84"1976.95"2.92"198	
Huntsville	53.9° 52.1°	81° 3/20/11 88° 3/31/63	32° 3/11/11 6° 3/3/80	9.76" 17.00" 198 6.11" 1.12" 200	

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Alabama Monthly Climate Summaries February 2011

	March Mean March Norm		Hi Temp ord Hi	March Low Temp Record Lo		Total Precip. Normal Prec.			Heaviest Day Record Day	
Mobile	63.0°	86°	3/19/11	32°	3/11/11	4.74"	13.46"	1980	2.21"	3/5/11
	71.2°	89°	3/15/67	21°	3/14/93	7.20"	3.00"	1981	7.15"	3/16/90
Montgomery	61.0°	88°	3/20/11	35°	3/12/11	7.41"	12.4"	1990	2.03"	3/9/11
	70.5°	89°+	3/22/95	17°	3/14/93	6.39"	1.75"	1997	7.89"	3/16/90
Muscle Shoals	52.8°	82.6°	3/20/11	30°	3/2/11	6.72"	14.25"	1980	2.02"	3/26/11
	63.8°	86°+	3/13/67	10°	3/3/43	6.21"	2.22"	1985	4.80"	3/27/94
Russellville	52.9°	82.9°	3/20/11	26.8°	3/11/11	9.09"	15.75"	1973	2.95"	3/26/11
	63.5°	84°+	3/24/95	5°+	3/4/80	6.28"	2.14"	2000	8.40"	3/16/73
Scottsboro	52.3°	81°	3/18/11	29.8°	3/12/11	11.28"	16.48"	1980	2.47"	3/9/11
	63.8°	90°	3/25/29	8°	3/14/93	6.52"	2.28"	1982	4.88"	3/16/73
Selma	58.5° 69.3°	84.7° 90°	3/20/11 3/25/36	32.2° 18°	3/4/80	8.30" 6.67"	14.06" 1.07"	1973 1985	2.41" 9.75"	3/5/11 3/16/90
Talladega	55.5°	81.1°	3/19/11	31.5°	3/12/11	10.49"	18.24"	1976	3.87"	3/9/11
	67.4°	88°+	3/24/95	6°	3/14/93	6.82"	1.18"	1985	7.81"	3/30/77
Thomasville	59.1°	84° 3/2	20, 26/11	29.5°	3/11/11	9.54"	15.35"	1976	2.36"	3/9/11
	57.6°	89°+	3/20/80	14°	3/3/80	6.95"	1.62"	1978	11.10"	3/12/35
Troy	59.7°	85.5°	3/20/11	32°	3/12/11	4.97"	13.75"	1990	2.52"	3/9/11
	69.1°	89°	3/12/55	13°	3/3/80	6.56"	1.81"	1982	8.56"	3/17/90
Tuscaloosa	57.5°	86°	3/20/11	32°	3/11/11	7.25"	19.99"	1976	2.67"	3/9/11
	69.6°	90°	3/23/95	12°	3/14/93	6.37"	1.12"	1986	6.08"	3/13/75
Valley Head	51.2°	78.6°	3/22/11	28.8°	3/25/11	10.56"	15.87"	1980	2.35"	3/9/11
	61.5°	84°+	3/20/82	2°	3/3/80	6.57"	1.91"	1985	4.87"	3/4/79
Statewide	49.38° 47.58°		ainesville our sites)		ussellville hree sites)	3.30" 6.08"				ghland H. airhope

M: Data is missing or not available *New Record

Community Collaborative Rain, Hail & Snow Network (CoCoRAHS) March 2011 No

	Ave. Total Precip.	# Stations
Autauga	8.69	4
Baldwin	4.51	27
Barbour	4.83	2
Bibb	5.05	2
Blount	9.62	8
Bullock	NA	0
Butler	NA	0
Calhoun	8.55	4
Chambers	4.02	1
Cherokee	13.38	1
Chilton	10.23	2
Choctaw	5.54	1
Clarke	9.77	2
Clay	NA	0
Cleburne	NA	0
Coffee	3.98	2
Colbert	7.75	7
Conecuh	NA	0
Coosa	5.41	2
Covington	NA	0
Crenshaw	NA	0
Cullman	7.80	7
Dale	4.77	1
Dallas	NA	0
DeKalb	11.88	3
Elmore	6.88	10
Escambia	2.61	2
Etowah	10.43	1
Fayette	9.55	3
Franklin	9.88	1
Geneva	NA	0
Greene	NA	0
Hale	NA	0
Henry	1.89	1

March 20	011
	Ave.
Houston	
Jackson	
Jefferson	
Lamar	
Lauderdale	
Lawrence	
Lee	
Limestone	
Lowndes	
Macon	
Madison	
Marengo	
Marion	
Marshall	
Mobile	
Monroe	
Montgomery	
Morgan	
Perry	
Pickens	
Pike	
Randolph	
Russell	
St. Clair	
Shelby	
Sumter	
Talladega	
Tallapoosa	
Tuscaloosa	
Walker	
Washington	
Wilcox	
Winston	

Stations
3
7
12
1
19
2
3
16
0
1
62
0
1
12
20
0
4
10
0
1
0
3
3
4
18
0
6
8
4
1
1
2
2

Normal	
March	
Precipitatio	n*
Abbeville	5.02"
Alex City	
Aliceville	5.88"
Andalusia	6.40"
Ashland	6.68"
Athens	5.41"
Bay Minette	6.31"
Bessemer	6.01"
Billingsley	5.84"
Centreville	5.49"
Chatom	6.17"
Claiborne L&D	5.85"
Clayton	6.11"
Dauphin Isl	5.65"
Elba	5.61
Eufaula WR	5.84
Evergreen	5.29
Fayette	5.74°
Geneva 2	
Greenville	5.20°
Haleyville	5 02"
Hamilton 3S :	5.05 6 17"
Heflin	0.47 6 02"
Jasper	5.02 5.2 2 "
Lafayette	5.52 5.44"
Livingston	5 05"
Melvin	7 11"
Milstead	
Moulton	
Oneonta	5.10 5.22"
Perryville	5.22 5.21"
Pine Apple	5.21 5.49"
Plantersville	
Rock Mills	
Rockford	6.60"
Sylacauga	5.91"
Union Springs	5.09"
Uniontown	5.99"
Vernon	5.49"
Warrior L&D :	5.81"
Wetumpka	
-	

*Southeast Regional Climate Center www.serrc.com

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New Daily Local Climate Records¹

March 2011

Maximum High Temperature

	New Record	Previous Record	Previous Year	Period of Record
1 March 2011				
BANKHEAD L&D	78.0°F	77.0°F	1981	51
BRIDGEPORT		73.0°F	2007	44
CENTREVILLE 6 SW		79.0°F	1981	36
CLAYTON		78.0°F	1976	48
DAUPHIN IS #2	73.0°F	71.0°F	2009	33
GAINESVILLE LOCK	84.0°F	81.0°F	1981	50
GUNTERSVILLE	76.0°F	74.0°F	2007	53
HAMILTON 3 S	79.0°F	78.0°F	2007	48
ONEONTA	79.0°F	78.0°F	1981	92
OPELIKA		78.0°F	1976	47
SAND MT SUBSTN	76.0°F	75.0°F	1955	61
SYLACAUGA 4 NE	79.0°F	78.0°F	1976	50
3 March 2011				
GENEVA #2	86.0°F	82.0°F	2004	34
18 March 2011				
MUSCLE SHOALS AP	82.0°F	81.0°F	1982	70
19 March 2011				
BRIDGEPORT 5 NW		80.0°F	1963	44
MOBILE RGNL AP	86.0°F	84.0°F	2003	63
MONTGOMERY AP	86.0°F	85.0°F	2003	63
20 March 2011				
ALEXANDER CITY		84.0°F	1979	41
CLAYTON		84.0°F	2002	47
ENTERPRISE 2 W		86.0°F	1982	39
MONTGOMERY AP		87.0°F	2004	63
TUSCALOOSA ACFD	87.0°F	86.0°F	2004	61
21 March 2011				
ATMORE		85.0°F	2004	49
CENTREVILLE 6 SW		86.0°F	2004	36
GAINESVILLE LOCK	86.0°F	85.0°F	2004	50

RUSSELLVILLE #2 86.0°F	84.0°F	2004	55
THORSBY EXP STN	83.0°F	2004	51
22 March 2011			
BANKHEAD L&D 82.0°F	81.0°F	1966	51
BIRMINGHAM AP 84.0°F	83.0°F	1995	81
FAYETTE84.0°F	83.0°F	1952	65
LIVINGSTON	86.0°F	1907	89
MUSCLE SHOALS AP 82.0°F	81.0°F	1991	70
SAND MT SUBSTN 77.0°F	76.0°F	2007	58
23 March 2011			
ENTERPRISE 2 W 84.0°F	83.0°F	1997	40
GENEVA #2 86.0°F	83.0°F	1997	34
HEADLAND87.0°F	85.0°F	1991	57
RUSSELLVILLE #2 82.0°F	80.0°F	1991	56
24 March 2011			
MOBILE DOWNTOWN AP 84.0°F	81.0°F	2007	48
26 March 2011			
MOBILE DOWNTOWN AP 83.0°F	80.0°F	2007	48
MOBILE RGNL AP 84.0°F	82.0°F	1988	63
27 March 2011			
FAIRHOPE 2 NE 84.0°F	83.0°F	2007	90
MOBILE DOWNTOWN AP 85.0°F	81.0°F	1945	48
MOBILE RGNL AP 85.0°F	82.0°F	1994	63
28 March 2011			
EUFAULA WILDLIFE REF 86.0°F	85.0°F	2007	43
FAIRHOPE 2 NE 84.0°F	83.0°F	2007	92
GENEVA #2 85.0°F	84.0°F	2007	34
29 March 2011	0 4 00 F	1000	
GENEVA #2 85.0°F	84.0°F	1989	34

Highest One-Day Precip., Month

New Reco			Period of Record
9 March 2011			
DEMOPOLIS L&D 4.75	in 4.11 in	3/31/76	59

¹http://lwf.ncdc.noaa.gov/extremes/records.php

* This record differs from long-term data in the AOSC climate database: http://nsstc.uah.edu/alclimate/climate/daily_climate_and_normals.php

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Precipitation

Dro	ecipita	tion			MONTGOMERY AP2.03 in	1.56 in	1994	63
r ie	cipita				MOULTON 22.74 in	1.39 in	1994	53
	New	Previous	Previous	Period of	ONEONTA2.5 in	1.8 in	1909	116
	Record	Record	Year	Record	PALMERDALE3.4 in	1.58 in	1976	62
1 March 2011					PINSON	1.73 in	1994	30
ADDISON		0.28 in	1994	73	PLANTERSVILLE 2 SSE2.45 in	1.05 in	1999	71
PINE APPLE	1.72 in	1.3 in	1995	43	ROCK MILLS1.61 in	0.96 in	1946	72
5 March 2011					SAND MT SUBSTN2.25 in	1.93 in	1998	62
ATHENS	2.1 in	2.06 in	2004	69	SCOTTSBORO3.56 in	2.9 in	1928	119
DAUPHIN IS #2	0.63 in	0.16 in	1981	35	SYLACAUGA 4 NE2.12 in	1.37 in	1987	61
TROY MUNICIPAL AP	1.12 in	0.98 in	1981	41	TALLADEGA2.79 in	2.5 in	1909	123
6 March 2011					THOMASVILLE	2.11 in	1958	119
ASHLAND 3 ENE	2 63 in	2.19 in	2003	71	THORSBY EXP STN2.72 in	1.18 in	1987	53
CALERA		2.2 in	1995	110	TROY MUNICIPAL AP2.7 in	0.68 in	2010	41
CENTREVILLE 6 SW		1.95 in	1983	36	TUSCALOOSA ACFD	0.99 in	1949	62
JACKSON		1.3 in	1984	49	TUSCALOOSA MUNI AP2.64 in	0.99 in	1949	62
LAY DAM		1.74 in	1963	74	TUSCALOOSA OLIVER DAM 2.43 in	2.37 in	1919	111
MELVIN		3.0 in	1903	74	UNIONTOWN	2.23 in	1909	117
MONTEVALLO		1.5 in	2003	117		2.23 m 1.3 in	1909	73
					VERNON			
PLANTERSVILLE 2 SSE		2.04 in	1943	71	WALNUT GROVE	1.9 in	1976	69
WEST BLOCTON	2.55 IN	2.3 in	2003	71	WARRIOR L&D	1.26 in	1958	53
8 March 2011					WEST BLOCTON	1.1 in	1958	71
FAYETTE		1.42 in	1947	119	10 March 2011			
TUSCALOOSA MUNI AP	1.25 in	1.18 in	1976	62	ALEXANDER CITY 1.76 in	1.52 in	2010	41
9 March 2011					ASHLAND 3 ENE1.69 in	1.43 in	2010	71
ADDISON		0.9 in	1990	73	ATMORE	0.89 in	1994	71
ALBERTA		1.34 in	1999	70	BREWTON 3 ENE	2.35 in	2006	33
ALICEVILLE L&D	3.95 in	0.74 in	1988	30	BREWTON 3 SSE2.1 in	1.95 in	1999	85
ANNISTON METRO AP	3.68 in	1.87 in	1949	108	BRUNDIDGE2.0 in	1.04 in	1978	80
ASHLAND 3 ENE	1.33 in	1.28 in	1949	71	CLAYTON2.2 in	0.94 in	2010	82
ATHENS	2.3 in	1.25 in	1962	69	DAUPHIN IS #2	1.01 in	1994	35
BANKHEAD L&D		1.3 in	1990	54	ENTERPRISE 2 W2.32 in	1.12 in	1994	44
BELLE MINA 2 N		1.52 in	1990	61	FAIRHOPE 2 NE2.13 in	1.76 in	1994	93
BESSEMER 3 WSW		1.73 in	1994	34	GENEVA #22.0 in	0.98 in	1994	34
BILLINGSLEY 3 NE		1.5 in	1998	72	HEADLAND1.62 in	0.96 in	1978	60
BIRMINGHAM AP		1.6 in	1994	81	HURTSBORO2.07 in	0.97 in	1988	32
CALERA		2.2 in	1998	110	JONES BLUFF L&D1.91 in	1.57 in	1994	30
CARBON HILL		1.25 in	1960	73	MILLERS FERRY L&D2.28 in	1.6 in	2010	30
CENTREVILLE 6 SW		1.6 in	1994	36	MITCHELL DAM 1.62 in	1.3 in	2010	74
CHILDERSBURG WTP		0.94 in	1976	50 54	WALLACE 2 E	1.7 in	1994	69
CLANTON		1.11 in	1970	118	14 March 2011	1.7 111	1334	03
DEMOPOLIS L&D		0.94 in	1921	59	ATHENS	0.88 in	2009	69
						0.00 11	2009	09
		1.21 in	1948	109	15 March 2011	0.00 :	2000	74
FAYETTE		1.22 in	1976	119	BERRY 3 NW 1.1 in	0.36 in	2009	71
FT PAYNE		1.73 in	1990	75	26 March 2011	4.40.1	4050	50
GAINESVILLE LOCK		1.64 in	1976	62	HUNTSVILLE INTL AP	1.46 in	1959	52
GADSDEN		1.13 in	1990	58	MUSCLE SHOALS AP2.36 in	2.17 in	1959	70
GUNTERSVILLE		1.7 in	1919	106	27 March 2011			
HAMILTON 3 S		1.08 in	1976	49	FT PAYNE2.7 in	1.34 in	1959	75
HIGHTOWER		0.9 in	1942	69	ADDISON1.38 in	1.31 in	1950	73
HOLT L&D	2.62 in	0.64 in	1988	30	JASPER1.8 in	1.57 in	1976	50
HUNTSVILLE INTL AP		1.55 in	1978	52	SAND MT SUBSTN1.3 in	1.18 in	1950	62
JACKSONVILLE	2.81 in	1.61 in	1949	62	SCOTTSBORO2.44 in	2.04 in	1936	119
JASPER	3.52 in	0.93 in	1976	50	28 March 2011			
LAY DAM		0.92 in	1976	74	LEEDS1.98 in	1.58 in	1935	94
LEEDS		2.27 in	1922	94	30 March 2011			
MELVIN		1.05 in	1976	71	BRIDGEPORT 5 NW2.05 in	1.58 in	1903	114
MITCHELL DAM		0.73 in	1946	74	JACKSON2.1 in	1.7 in	1991	49
MOBILE DOWNTOWN AP		1.19 in	1999	68	MOBILE DOWNTOWN AP 0.54 in	0.26 in	1960	68
MONTEVALLO		0.89 in	1958	117	TROY MUNICIPAL AP	1.06 in	1991	41
		0.00 11						

MONTGOMERY AP2.03 in 1.56 in

1994

63

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