



The
Alabama
Climate Report

Brought to you by the Office of the Alabama Climatologist

SEPTEMBER 2023



Volume 15, Number 5 :: SEPTEMBER 2023



Fall typically experiences drier conditions over much of Alabama, a welcome change for farmers and gardeners who depend on the drier weather to harvest their crops. The start of the fall 2023 season in September was marked by an abnormally dry month. Rainfall during the month amounted to 1.82 inches, less than half the normal 4.07 inches of rainfall. Due to the drier than normal weather, the entire state is now in some level of drought or abnormal dryness.

Unlike the previous month, September's rainfall was consistently sparse throughout the month. North Alabama was particularly dry, with many areas reporting only 25% or less of their normal precipitation as seen in the map below. Within that 25% or less area, the Muscle Shoals Airport recorded the driest location of the month with a measly 0.06 inches of rainfall with no missing observations. However, there were a few areas of substantial rainfall, with the Foley 2.0 SSW station recording the most rainfall this month at 7.15 inches.

From a temperature perspective, September was a welcome relief from the hot August that many in Alabama endured. Nevertheless, September was still 1.1°F above the statewide long-term average of 74.7°F. Interestingly, not a single station in Alabama recorded triple-digit temperatures in September. This was quite the contrast to August, with over 40 stations recording a temperature of 100°F or hotter. The warmest location of the month was at the Mobile Regional Airport, with a high temperature of 99°F on the 7th. In contrast, the coldest daily extreme of the month was recorded at stations at Valley Head 1 SSW and in DeSoto State Park at 47°F on the 24th.

As mentioned previously, drier weather can be welcomed by some farmers, however, the continued dryness and extreme heat from August is expected to have an impact on end of season yields. Late planted soybeans are expecting a significant drop in crop yield. Over the course of 4 weeks in Sept, we saw drought conditions increase by almost 50% according to the US Drought Monitor, with the introduction of Extreme Drought in the SW. The drought has also affected the productivity of pastureland, which is crucial for cattle operations. By the end of Sept, there were reports of producers having to purchase supplemental hay.

The end of September signifies the end of the water year (October 1st to September 30th). This water year in Alabama was slightly drier than normal. Alabama recorded 54.87 inches of precipitation (0.4 inches below the long-term average of 55.27 inches), the 60th driest on record. Alabama experienced a drier than normal water year for the first time since 2015.

As mentioned in previous Alabama Climate Reports, the severe weather season never really ends in Alabama, and there is a secondary peak in late fall, i.e., November. Let's be weather aware and prepared.

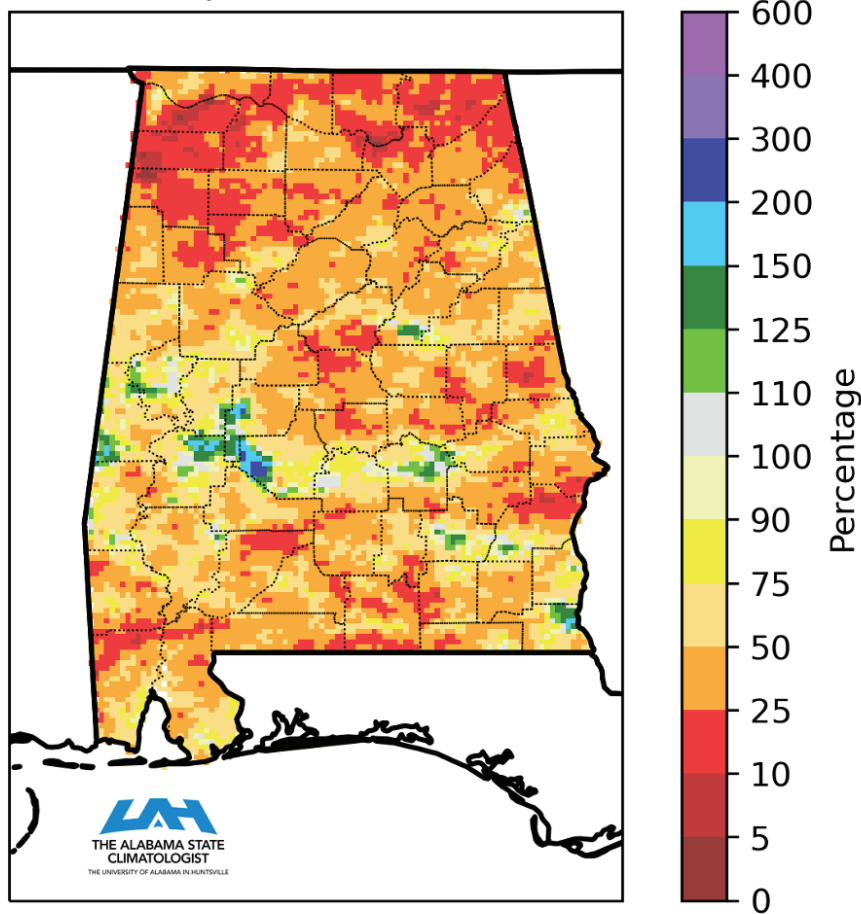
The end of August signals the end of climatological summer (June, July, August). How hot was it this summer? Depends on your location within the state. Residents of Huntsville had a slightly cooler than

normal summer on average. While residents from Mobile had the hottest summer observed in their 82-year record! Statewide, this summer was the 25th warmest on record, with an average temperature of 80.0°F, which is +1.1°F warmer than normal. Precipitation-wise, this summer was the 50th wettest on record, with 15.14 inches of precipitation, which is 1.07 inches wetter than normal.

NOTE: The Mobile Regional Airport station experienced its hottest August and summer in 2023. Additionally, the station set 7 daily maximum temperature records and 8 daily night-time maximum temperature records in August.

Monthly summaries are provided by Dr. Rob Junod, Lee Ellenburg and John Christy.

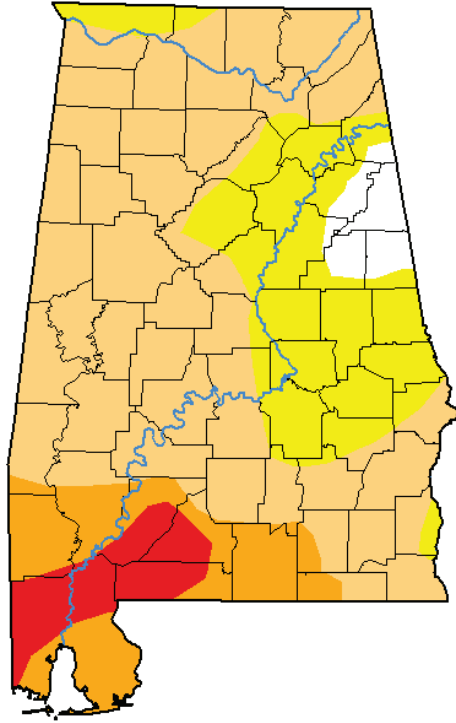
Precipitation Percent of Normal September 2023









DROUGHT MONITOR

U.S. Drought Monitor Alabama

October 3, 2023
(Released Thursday, Oct. 5, 2023)
Valid 8 a.m. EDT



Intensity:

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

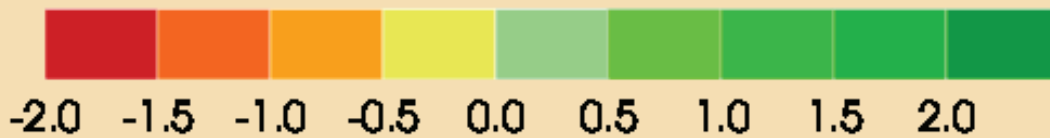
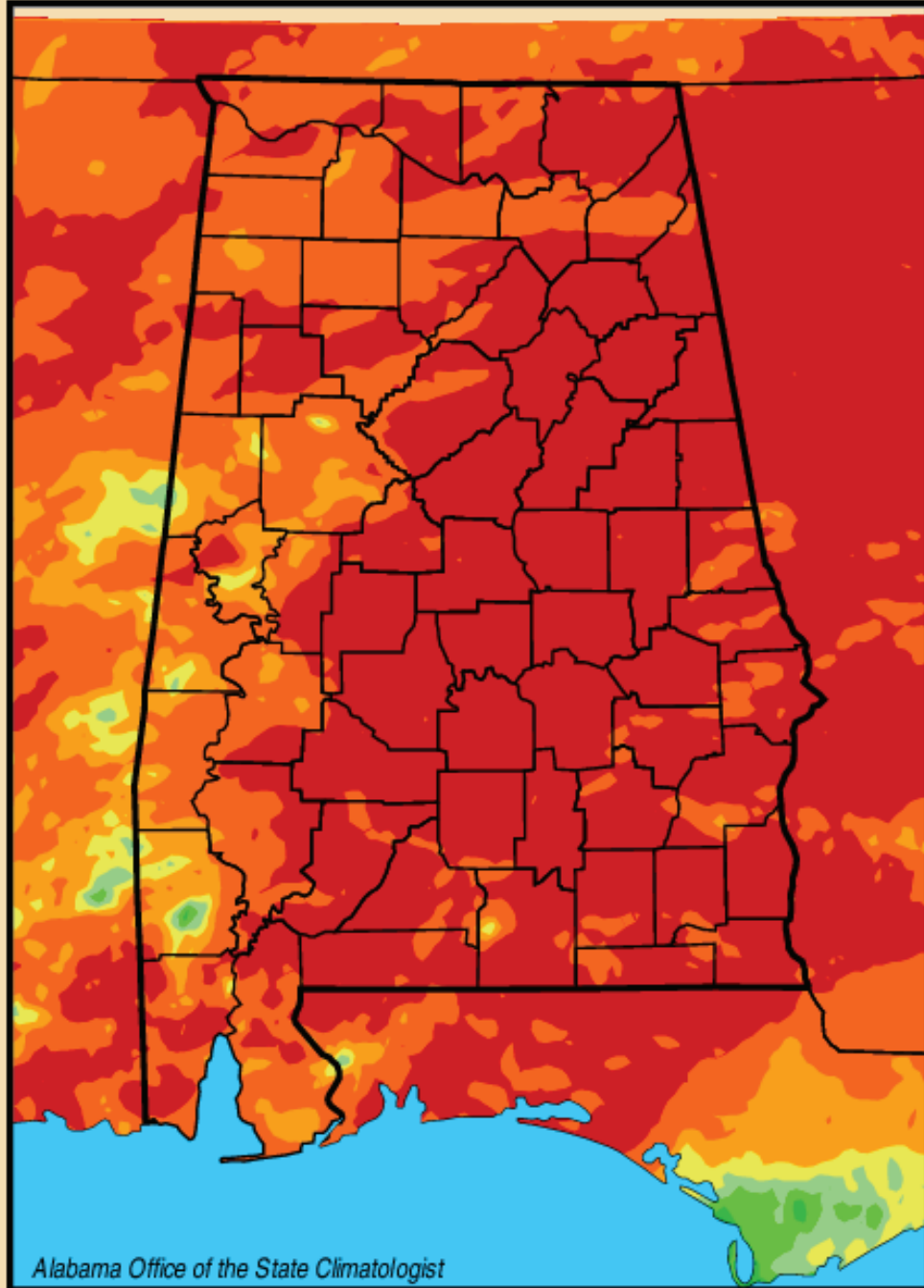
Brad Pugh
CPC/NOAA



droughtmonitor.unl.edu

LAWN AND GARDEN

Lawn-and-Garden Moisture Index
for October 8, 2023



ALABAMA MONTHLY CLIMATE SUMMARIES

Alabama Monthly Climate Summaries

September 2023

	Sept. Mean Sept. Norm	Sept. High Temp Record High	Sept. Low Temp Record Low	Total Precip. Normal Precip.	Wettest Sept. Driest Sept.	Heaviest Sept. Record Sept.
Anniston	74.9 73.8	94 9/12/23 101+ 9/1/57	54 9/18/23 34 9/30/67	2.84" 3.32"	7.22" 1975 .33" 1984	1.41" 9/16/23 3.99" 9/21/95
Auburn	M 75.9	M 108 9/5/25	M 34 9/30/67	M 3.60"	10.19" 1956 .36" 1919	M 6.48" 9/26/56
Birmingham	77.1 73.8	95 9/12/23 102 9/19/31	59 9/24/23 37 9/30/67	1.94" 4.05"	10.43" 1977 .16" 1984	.86" 9/16/23 3.70" 9/27/79
Brewton	75.6 75.1	95.9 9/7/23 101+ 9/15/72	56 9/19/23 32 9/30/67	1.58" 5.51"	25.20" 1998 0.02" 2019	.70" 9/17/23 9.30" 9/28/98
Calera	77.2 73.6	93 9/11/23 101 9/15/80	58 9/19/23 33 9/30/67	1.04" 3.76"	12.75" 1906 .07" 1955	.72" 9/16/23 7.05" 9/29/1906
Clanton	74.1 73	92 9/12/23 101+ 9/16/80	53.5 9/19/23 36 9/30/67	.72" 4.66"	10.30" 1979 .37" 1990	.46" 9/1/23 5.20" 9/28/79
Courtland	72 M	89.1 9/6/23 M	52.1 9/19/23 M	.41" M	M M	.20" 9/4/23 M
Cullman (St. Bernard)	70.7 M	88.3 9/5/23 M	51.4 9/19/23 M	.61" M	M M	.33" 9/15/23 M
Decatur (Pryor Field)	74.2 74.4	93 9/5/23 104 9/9/25	51 9/24/23 37 9/27/1899	1.47" 2.95"	8.49" 1946 0.01" 2019	.84" 9/2/23 4.34" 9/10/46
Dothan	78.4 76.9	97 9/7/23 100 9/3/40	59 9/23/23 45 9/29/67	2.61" 5.02"	13.86" 1929 0.06" 2019	1.85" 9/16/23 8.00" 9/30/29
Fairhope	77.4 77.3	93.2 9/7/23 100 9/10/54	58 9/19/23 41 9/30/67	.83" 5.97"	24.11" 1998 0.02" 2019	.21" 9/1/23 9.18" 9/28/98
Gadsden	70 73.1	87.1 9/12/23 102 9/3/54	49.6 9/24/23 33 9/30/67	2.72" 4.13"	9.29" 1979 0.09" 2019	2.41" 9/15/23 4.07" 9/22/58
Gainesville Lock	74.9 74.9	92.3 9/12/23 102 9/10/80	55.7 9/19/23 38 9/30/67	3.99" 3.61"	11.85" 1974 0.02" 2019	2.71" 9/1/23 4.26" 9/5/49
Greensboro	74.8 76.1	90.9 9/12/23 104+ 9/5/54	54.3 9/19/23 39 9/30/67	2.37" 3.93"	9.13" 1974 0.00" 2019	2.22" 9/1/23 4.79" 9/5/49
Guntersville	M 72.2	M 102 9/4/54	M 38 9/30/67	M 4.23"	11.07" 1977 .12" 1984	M 4.06" 9/12/88
Highland Home	75.5 74.7	92.7 9/11/23 102 9/11/80	58.4 9/29/23 37+ 9/30/67	2.32" 4.03"	13.19" 1975 0.02" 2019	1.00" 9/16/23 6.35" 9/26/53
Huntsville	74.8 72.9	93 9/26/23 101 9/7/90	53 9/24/23 37 9/30/67	1.19" 3.94"	9.78" 1980 0.27" 2019	.49" 9/2/23 3.93" 9/25/80
Mobile	81.4 77.2	99 9/7/23 99+ 9/4/90	63 9/19/23 42 9/29/67	2.12" 6.01"	24.13" 1998 .74" 1984	.98" 9/20/23 8.60" 9/28/98
Montgomery	78.2 76.3	95 9/7/23 101+ 9/10/80	58 9/23/23 39 9/30/67	3.28" 4.22"	9.47" 1998 0.05" 2019	2.18" 9/1/23 8.72" 9/26/53
Muscle Shoals Airport	75.7 72.9	93 9/26/23 103 9/4/54	52 9/19/23 39+ 9/23/82	.06" 4.30"	10.13" 1979 0.11" 2019	.02" 9/1/23 5.71" 9/13/79
Russellville	69.7 71.2	88.5 9/26/23 102+ 9/6/54	48.4 9/19/23 30 9/30/67	.01" 4.18"	10.06" 1975 .34" 1999	.01" 9/21/23 5.33" 9/14/79
Scottsboro	70.5 71.5	90.2 9/12/23 105+ 9/6/54	49.5 36+ 9/27/40	.70" 4.81"	10.99" 1977 0.00" 2019	.62" 9/16/23 4.92" 9/28/79
Selma	75.7 76.2	94.7 9/11/23 105 9/6/54	54.7 9/19/23 40 9/30/67	2.18" 3.87"	10.96" 1998 0.02" 2019	.97" 9/1/23 6.15" 9/29/98
Talladega	73.5 71.8	93.7 9/11/23 103 9/4/54	54.2 9/24/23 35 9/30/67	2.32" 3.76"	8.04" 1979 0.07" 2019	1.48" 9/16/23 4.00" 9/23/75
Thomasville	74.9 76.2	91.8 9/6/23 104 9/11/80	55.1 9/19/23 39 9/29/67	1.72" 4.13"	13.42" 1998 0.06" 2019	1.06" 9/1/23 7.30" 9/8/74
Troy	74.2 75.8	92.1 9/11/23 104 9/8/54	56.6 9/23/23 38 9/30/67	5.40" 3.52"	13.29" 1998 0.29" 1980	3.12" 9/1/23 7.46" 9/1/37
Tuscaloosa	77.6 75.6	96 9/12/23 104 9/1/51	55 9/19/23 37 9/30/67	1.16" 3.48"	10.91" 2009 0.00" 1955	.64" 9/25/23 6.28" 9/3/01
Valley Head	70 69.3	89.3 9/4/23 100+ 9/7/54	46.8 9/24/23 29 9/30/67	.39" 4.27"	9.77" 1977 0.64" 2019	.24" 9/16/23 5.38" 9/17/60

NEW ALABAMA CLIMATE RECORDS

NO MONTHLY WEATHER RECORDS FOR SEPTEMBER 2023						
Highest Maximum Temperature Daily Record						
STATION	DATE	RECORD	PREV. DATE	PREV. RECORD	NUMBER OF YEARS	DIFFERENCE
MOBILE DOWNTOWN AIRPORT, AL US	9/7/23	97	9/7/19	95	74	2
MOBILE REGIONAL AIRPORT, AL US	9/7/23	99	9/7/19	97	75	2
MOBILE REGIONAL AIRPORT, AL US	9/26/23	95	9/26/19	95	75	0
DAUPHIN ISLAND NUMBER 2, AL US	9/27/23	90	9/27/22	90	47	0
Highest Minimum Temperature Daily Record						
ROCK MILLS, AL US	9/1/23	74	9/1/51	74	81	0
MOBILE REGIONAL AIRPORT, AL US	9/2/23	77	9/2/93	77	75	0
MOBILE REGIONAL AIRPORT, AL US	9/3/23	77	9/3/12	77	75	0
DAUPHIN ISLAND NUMBER 2, AL US	9/4/23	84	9/4/12	82	47	2
GREENSBORO, AL US	9/4/23	76	9/4/08	75	131	1
MARION JUNCTION 2 NE, AL US	9/4/23	73	9/4/22	73	73	0
MOBILE DOWNTOWN AIRPORT, AL US	9/4/23	80	9/4/08	80	74	0
DEMOPOLIS LOCK AND DAM, AL US	9/5/23	74	9/5/00	74	71	0
MOULTON 2, AL US	9/5/23	73	9/5/12	73	66	0
RUSSELLVILLE NUMBER 2, AL US	9/5/23	72	9/5/14	70	69	2
MOBILE DOWNTOWN AIRPORT, AL US	9/5/23	79	9/5/00	79	74	0
MUSCLE SHOALS AIRPORT, AL US	9/5/23	75	9/5/47	75	82	0
HAMILTON, AL US	9/6/23	72	9/6/18	71	61	1
MOULTON 2, AL US	9/6/23	71	9/6/18	71	66	0
HAMILTON, AL US	9/13/23	73	9/13/20	72	61	1
GREENSBORO, AL US	9/16/23	75	9/16/27	75	131	0
Highest Precipitation Daily Record						
COFFEEVILLE LOCK AND DAM, AL US	9/2/23	0.55	9/2/86	0.41	40	0.14
DEMOPOLIS LOCK AND DAM, AL US	9/2/23	1.92	9/2/90	1.03	71	0.89
GAINESVILLE LOCK, AL US	9/2/23	3.83	9/2/01	1.6	75	2.23
WARRIOR LOCK AND DAM, AL US	9/2/23	1.9	9/2/12	0.78	65	1.12
COFFEEVILLE LOCK AND DAM, AL US	9/3/23	1	9/3/86	0.73	40	0.27
COFFEEVILLE LOCK AND DAM, AL US	9/15/23	0.25	9/15/08	0.23	40	0.02
JACKSON, AL US	9/17/23	2.14	9/17/21	0.62	61	1.52

CoCoRAHS

Community Collaborative Rain, Hail and Snow Network (CoCoRAHS)

January 2022

	Ave. Total Precip.	# Stations		Ave. Total Precip.	# Stations		Normal January Precipitation*	
Autauga	2.41	2	Houston	5.24	2		Abbeville	5.30
Baldwin	2.43	31	Jackson	5.41	5		Alberta	4.84
Barbour	4.04	1	Jefferson	4.33	20		Alex City	5.69
Bibb	n.a.	0	Lamar	1.20	1		Aliceville	5.30
Blount	3.63	4	Lauderdale	5.33	12		Andalusia	5.17
Bullock	n.a.	0	Lawrence	5.47	4		Ashland	5.48
Butler	3.31	1	Lee	4.34	5		Athens	6.06
Calhoun	4.40	2	Limestone	6.13	8		Bay Minette	5.43
Chambers	n.a.	0	Lowndes	n.a.	0		Bessemer	5.34
Cherokee	n.a.	0	Macon	2.32	1		Billingsly	4.98
Chilton	5.46	1	Madison	6.20	23		Centreville WSMO	5.63
Choctaw	3.11	1	Marengo	n.a.	0		Chatom	5.45
Clarke	5.28	3	Marion	4.99	1		Claiborne L&D	5.49
Clay	5.13	1	Marshall	5.25	11		Clayton	4.91
Cleburne	n.a.	0	Mobile	2.67	21		Dauphin Isl.	5.86
Coffee	n.a.	0	Monroe	3.93	3		Elba	5.08
Colbert	6.34	6	Montgomery	5.61	4		Eufaula WR	5.20
Conecuh	n.a.	0	Morgan	5.54	6		Evergreen	5.55
Coosa	6.13	1	Perry	n.a.	0		Fayette	5.75
Covington	3.29	1	Pickens	1.15	1		Geneva 2	6.43
Crenshaw	n.a.	0	Pike	n.a.	0		Greenville	4.98
Cullman	3.56	4	Randolph	3.22	1		Haleyville	5.79
Dale	n.a.	0	Russell	2.40	2		Hamilton 3S	5.31
Dallas	4.90	1	St. Clair	4.12	6		Heflin	5.31
Dekalb	5.33	7	Shelby	4.44	15		Hurtsboro	4.89
Elmore	5.92	4	Sumter	n.a.	0		Jasper	5.71
Escambia	3.58	1	Talladega	4.11	4		Lafayette	5.19
Etowah	3.36	3	Tallapoosa	4.11	1		Livingston	4.77
Fayette	n.a.	0	Tuscaloosa	4.74	5		Melvin	5.25
Franklin	n.a.	0	Walker	5.17	1		Millstead	4.85
Geneva	n.a.	0	Washington	4.79	1		Moulton	5.03
Greene	n.a.	0	Wilcox	6.83	2		Oneonta	5.39
Hale	n.a.	0	Winston	4.75	2		Perryville	5.00
Henry	n.a.	0					Plantersville	5.26
							Rock Mills	5.39
							Rockford	5.54
							Sylacauga	5.14
							Union Springs	4.77
							Uniontown	4.99
							Vernon	5.95
							Warrior L&D	5.34
							Wetumpka	4.87

The background of the entire page is a photograph of several sailboats docked on a lake. The sky is a warm, golden-orange color, suggesting a sunset or sunrise. The water is calm, and the boats are silhouetted against the bright sky. The overall mood is serene and peaceful.

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