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Indiana State Climate Office
Monthly Weather Report

Sep 10, 2012

http://www.iclimate.org

August 2012 Climate Summary

Month Summary

A two month long heat wave finally subsided after August 8th, the last date thermometers in Indiana reached or exceeded 100°F this year. The heat wave was replaced by a 14 day stretch of below normal temperatures through August 22nd. Temperatures the rest of August were generally a little above normal. The end of the torrid heat coincided with the peak of the summer drought. After weeks of intensification the drought reversed course the second week of August and rains returned to Indiana.

The state average August temperature was 72.3°F, just 0.3°F below normal. This near-normal temperature breaks a 9 month long string of warmer than normal months in Indiana. The day split reflects well the balanced August temperatures. There were 15 days of below normal temperature, 1 day at normal, and 15 days with above normal temperature. No days had temperatures that were at least 10°F above normal. The highest local official daily temperature in the state was 105°F on August 2nd at West Lafayette. Just 13 cooperative weather stations recorded temperatures at or above 100°F in August, far less than the 92 stations last month. The lowest daily official August temperature was 42°F recorded on August 18th at Wanatah.

The state precipitation total was 3.95 inches, slightly above the normal 3.79 inches. Rainfall was generally 20% above normal in northern and central Indiana but 30% below normal across the south. The slightly wetter than normal state average halts the 6 month string of below normal rainfall months. This is also the 35th wettest August on record. August 2007 with 4.56 inches was the most recent wetter August, ranking in 23rd place. At the top of the heap is August 1977 with its 6.69 inches. On August 3rd 4.40 inches fell at Myers bridge near Hovey Lake, the largest daily cooperative station rainfall in August 2012. The highest daily measurement among CoCoRaHS observers was 5.14 inches at Bloomington on August 17th . Precipitation generally fell on about 14 days around Indiana this month.

With lower temperatures there were far fewer severe weather days than in July. Severe weather occurred on only four August days compared with 16 days in July. The sole confirmed tornado this month was an EF-1 which touched down in Laporte county on August 4th. There were no injuries or deaths in this event. Thunderstorms tossed large hail over 13 counties on August 9th. Details on all the severe weather events follow in the weekly narratives.

August 1st – 7th

The very active Indiana weather pattern of last week has quieted considerably as August begins. Yet a tornado was confirmed for August 4th , the single severe weather day this week. Just one front passed through the state.

The summer heat may be slowly relenting. At the end of this week the hot upper atmospheric ridge is migrating westward, allowing cooler air easier access to our region. Daily temperatures moderated some as the week started at 4°F above normal. A stationary front held along the Ohio River through August 3rd . Meanwhile a cold front in Michigan retreated as a warm front before it could reach Indiana. A brief surge of warm air the next day allowed Indiana temperatures to peak at 7°F above normal. A new cold front finally passed through our state on August 5th , lowering daily temperatures to just 1°F above normal. The week closed with a minor warm up to 3°F above normal. Overall for the week temperatures averaged 4°F above normal. Typically at the start of August daily maximum temperatures would be expected to range between 82°F in the far north to 88°F in southwestern counties. Daily minimums normally vary between 63°F and 67°F north to south across the state.

Another round of heat pushed temperatures past the century mark on August 2nd . Of 85 cooperative stations reporting this week so far, 10 of these noted a maximum temperature of 100°F or higher. At one location in West Lafayette, the thermometer soared to 105°F, the highest reported temperature in the state this week. The minimum temperature this week was 52°F recorded at several spots on multiple dates.

Rain fell almost every day as the stationary front triggered light showers. Rain was heavier in the warm moist air ahead of the cold front. The end of the week was dry. For the week rainfall averaged about 1.2 inch across northern Indiana, 1.1 inch in central, and 0.7 inch in the south. These totals are near 140% of normal in the north, 120% in central Indiana, but only 70% of normal in southern Indiana. The heaviest single day rainfall report by a CoCoRaHS observer was 3.90 inches at Portland on August 5th . Two days earlier in far southwest Indiana, 3.22 inches was measured by the CoCoRaHS volunteer in Chandler while in Holland 2.92 inches was observed. The Evansville gage had caught 2.81 inches that day. Over the full week 4.29 inches was collected in Winchester while Holland picked up 3.92 inches. Newburgh summed 3.91 inches of rainfall, Evansville 3.71 inches, and Darmstadt 3.29 inches. It was finally raining in drought parched southwest Indiana!

Storm damage was widespread on August 4th ahead of the cold front. An EF-1 tornado was confirmed in northeast Laporte county near Rolling Prairie. The path of the tornado was about one mile long. In its path a garage door failed allowing winds to enter and blow out a wall of the garage. Just past the garage an unanchored shed was rolled over and destroyed. Later a barn was destroyed near the end of the tornado's path.

High wind damage was by far the most common complaint this day although small pockets of hail were noted. There were two main swaths of storm damage: in counties along the Michigan border, and another between Indianapolis and Fort Wayne.

Winds up to 70 mph in Lake county caused a tree to fall on a house. Two homes caught fire in Porter county due to lightning strikes with winds to 59 mph there. In Laporte county a carport was damaged in 51 mph winds while power lines and trees were strewn around. Field corn was flattened in 66 mph winds near South Bend. Falling power lines started fires in Marshall county when trees fell on roadways and utility lines. More trees fell in Kosciusko county and wind speeds near 65 mph were observed in Elkhart county. Hail at 1.25 inch diameter fell in Laporte county.

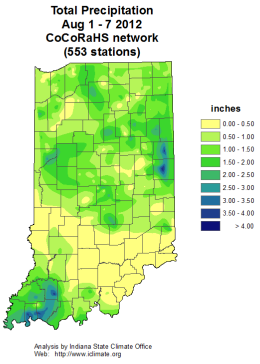
In the second swath of storm damage winds peaked at 71 mph in Allen county. Trees fell on roads in Wells, Adams, and Huntington counties as well as into power lines in Huntington and Jay counties. A building was destroyed in Tipton county and another home there had moderate damage when a tree fell on it. An outbuilding was damaged in Boone county. A tree fell on a road and a pickup truck in 63 mph winds in Marion county, cutting power to some residences. Other counties reporting trees fallen on roads included Delaware. Putnam. Morgan, Hancock, Henry, and Wayne. Measured wind speeds reached 65 mph in Grant county and 60 mph in Randolph county. One inch hail fell in Randolph, Grant, and Pulaski counties.

The drought continues to be the greatest weather concern in Indiana. The August 7th edition of the US Drought Monitor shows a worsening of conditions in our state with exceptional drought (D4 category) covering 25% of Indiana. About 44% of our state is now rated in extreme drought (D3 category), 9% higher than a week ago. Nearly 5% of each moderate (D1 category) and severe (D2 category) drought area was shifted into the extreme (D3 drought) category. The latest Weekly Weather and Crops Report survey now rates 89% of Indiana topsoil as short or very short of moisture. The survey places 95% of subsoil moisture into these categories.

The weekly report also notes the rains this week benefited some pastures and alfalfa. Yet farmers are also seeing some wells running dry along with creeks and small farm ponds. The Indiana corn crop is rated 7% good to excellent condition with soybeans at 15% good or excellent. Livestock continued to experience heat stress. Pastures which livestock normally feed on are generally dismal, rated at 2% good or excellent condition.

The rain which did fall this week prompted some counties to lift their mandatory burn bans. The list of counties and the dates the bans were lifted are:

Aug 1 - Starke
Aug 2 – Jay, Madison
Aug 6 - Randolph
Aug 7 – Grant, Perry



August 8th – 14th

Two months of hot Indiana summer weather finally came to an end. This week began hot with thermometers in some cities again shattering the 100°F mark. Daily state average temperatures peaked this first day at 5°F above normal. A stationary front in northern Indiana pushed south as a cold front on August 9th, setting off numerous severe thunderstorms with damaging hail over a wide section of northwest and west central Indiana. Another cold front followed immediately the next day. Temperatures fell a little more to around 5°F below normal and remained cool over the next 5 days, marking the longest stretch of below normal temperatures in Indiana since the first week of June.

Cool refreshing air on the front side of high pressure continued to flow into the state from Canada, a welcome relief from weeks of torrid heat. The high pressure center migrated eastward, allowing warmer air to overrun cool air at the ground on August 13th . An occluded front moved through the state on August 14th . Temperatures rose slightly to 3°F below normal to close out the week. Normally for mid-August daily maximum temperatures range from 81°F to 88°F north to south across Indiana. Daily minimums should vary between 62°F in northern counties to 66°F in the far southwest.

Before the cool down this week thermometers in a few Indiana cities once again ascended past the century mark. On August 8th two official stations in Terre Haute peaked at 102°F and 100°F. The NWS office in Indianapolis and a cooperative weather station in Farmersburg each hit 100°F. The next day Bedford noted a high temperature of 101°F while at Shoals the high mark was 100°F. None of the other 83 cooperative stations which have reported in so far have broken the 100°F line.

Rain fell on 6 of 7 days this week. Slightly below normal amounts were measured across southern Indiana but above normal totals in northern and central sections. The bulk of this rain came with the two cold fronts early in the week and during the occluded frontal passage at the end. Totals for the week averaged near 1.4 inch across northern Indiana, 1.6 inch in central, and about 0.7 inch in southern counties. These amounts are about one and a half times normal in the northern third of Indiana, about double in the central region, and just shy of normal in the southern third of the state. The highest single day CoCoRaHS reports were seen on August 10th, and included 3.56 inches in Huntingburg, 3.32 inches at Holland, and 3.03 inches in English. The day before 2.86 inches was

measured at both Indianapolis and Crawfordsville. For the full week the Crawfordsville station totaled 4.81 inches, Huntingburg 4.12 inches, and Holland 3.87 inches.

The intense rainfall was part of the severe weather action that erupted at the start of this week. The damage began as early as August 8th when high winds in Ripley county destroyed two out-buildings and tore down some trees. In Bartholomew county trees fell on to some houses and disrupted power. One inch diameter hail was reported in Johnson county.

Large hail was reported in 13 counties the next day, primarily in northwest and west central Indiana. Hail stones up to 2.75 inches in diameter fell in Newton county. Two-inch hail was reported in Carroll, Warren, and Fountain counties. Car windshields and home windows were broken, siding dented, and crops shredded by the hail in Carroll county with damage estimates exceeding $1 million. In Fountain county cars and home roofs were damaged and trees were ripped by the hail. Other western counties hit by hail sizes between 1.0 and 2.0 inches included Jasper, White, Benton, Tippecanoe, Montgomery, and Hendricks. Whitley, Wabash, and Huntington counties in northeast Indiana noted hail up to 1.5 inches in diameter.

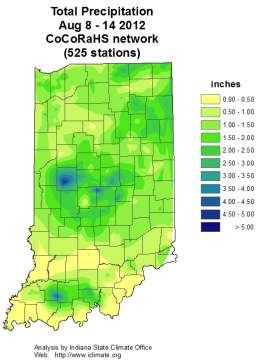
High winds were embedded in these severe hail storms. Winds to 65 mph toppled trees on to power lines in Carroll county while trees fell on a garage and power lines in Tippecanoe county. In Shelby county trees fell on a car and a house. A home was also hit by trees far to the southeast in Jefferson county. High winds also snapped trees in Putnam and Scott counties.

The August 14th edition of the US Drought Monitor shows general improvement in conditions across the northern half of Indiana and slight improvement in the southwest. Northern Indiana counties have shown a 1-category improvement since a week ago. Most notable is the downgrade from extreme (D3 category) to severe (D2 category) drought conditions in northeast Indiana. The exceptional drought (D4 category) area has shrunk a bit in the southwest. These changes are reflected in the coverage statistics where the total exceptional (D4) drought area has decreased by 9% and each of the extreme (D3) and severe (D2) drought areas have fallen by 14% over the last week. Indiana maps extracted from the US Drought Monitor can be found near the end of this monthly summary.

The USDA Indiana Weekly Weather and Crop Bulletin issued August 12th concurs with the improving conditions. The welcome rain and cooler temperatures should help the hay supply as pastures green up again. Currently corn which has been sacrificed to silage is being chopped and fed to cattle. Stress to livestock is reduced as cooler and wetter conditions have returned to Indiana. Corn condition this week stands at 9% good to excellent while soybeans are rated 16% in these categories. Pasture is only ranked at 3% good to excellent condition. The soil moisture survey in the report places topsoil moisture status at 82% short or very short while subsoil is rated at 93% in these categories.

The recent rains have led to a flurry of activity in the lifting of county burn bans. Counties which have lifted their mandatory burn bans this week and the effective dates are:

August 9 – Tipton
August 10 – Clinton, Jasper, Tippecanoe, Union, White
August 13 – Carroll, Daviess, Decatur, Montgomery, Rush
August 14 – Boone, Delaware, Fountain, Franklin, Hancock, Hendricks, Pike, Warren



August 15th – 21st

A major shift in our weather pattern last week ended two months of hot weather and began a cool spell. Below normal temperatures continued into this week, extending the string to 12 consecutive cool days. With high pressure overhead this week began just 1°F below normal. Temperatures fell each of the next 3 days as a cold front worked its way through Indiana on August 17th. Skies cleared the next day, the coolest, as temperatures hit bottom at 9°F below normal. A weak cold front pushed through the state on August 20th but the thermometer hardly budged. Very slow warming to the end of the week finished it off at 6°F below normal. Overall for the week our temperatures averaged about 5°F below normal. Typically for this third week of August daily maximum temperatures should range from 81°F in far northern Indiana to 88°F in the extreme southwest. Daily minimums normally vary between 62°F and 66°F north to south across the state.

Rain fell somewhere in Indiana almost every day this week but the only significant amounts fell during the cold front push early in the week. Generally weekly totals were about 0.6 inch in northern Indiana and 1.0 inch in central and southern areas. These totals equate to about 60% of normal in the northern third of the state, 120% in central counties, and 130% of normal across southern Indiana. The heaviest single day localized amounts were reported the morning of August 17th. That day two CoCoRaHS observers in Bloomington noted 5.14 inches and 3.35 inches. The Spencer volunteer had 3.12 inches while 2.88 inches was measured in Oolitic and 2.86 inches at Crawfordsville. Some of the heaviest weekly totals included the 5.14 inch rain at Bloomington, 3.29 inches in Spencer, and 2.84 inches at Jasonville. The Bedford gage summed to 2.78 inches for the week. The Russellville observer had 2.51 inches.

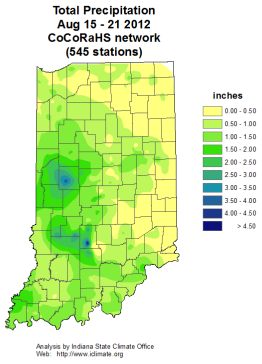
In advance of the early cold front severe weather was reported on August 16th. One inch hail fell in Owen county while 1.75 inch hail was seen in Vigo county. But most of the severe weather damage was caused by high winds along two lines, both in southern Indiana. Winds up to 60 mph were noted in Sullivan, Crawford, and Spencer counties. There was tree damage in Owen, Monroe, and Jackson counties. Several trees fell on roads in Knox, Dubois, and Spencer counties. Some power lines also came down in these counties. Further north trees fell in wind gusts on Tippecanoe county roads.

Drought conditions continue to improve in Indiana. The August 21st edition of the US Drought Monitor shows all or portions of 9 counties in far southwest Indiana have moved from exceptional (D4 category) into extreme (D3 category) drought status, reducing exceptional drought land coverage from 17% to 11% in the past week. The northern extent of the extreme drought area last week has been moved approximately one county southward, reducing total extreme drought coverage from 29% to 26%. No other significant changes were made to the Indiana drought map since a week ago. Maps of the Indiana weekly drought status are found at the end of this monthly summary.

The August 19th edition of the Indiana Weekly Weather and Crop report highlights the agricultural impacts of the ongoing drought. Even with new rainfall no improvement is expected in corn crop status and some harvesting has started in scattered southern fields. The corn crop is rated at 9% in good to excellent condition. Soybeans can still be helped by rainfall and this shows in its improved rating to 20% in good to excellent condition. Pasture and hay fields are also responding to the latest rains, improving to 6% in good to excellent condition this week. Livestock have recovered to good condition with less stress under cooler temperatures. The soil moisture survey rates topsoil at 73% short or very short of moisture this week while subsoil condition is put at 87% in these same categories.

County officials have taken notice of the revival of grass and other vegetation as more Indiana counties have decided to cancel their mandatory burn bans. Counties which have lifted their bans this week and the effective dates are:

August 15 – Hamilton, Wayne
August 16 – Knox
August 17 – Dubois, Harrison, Morgan, Sullivan
August 18 – Bartholomew, Posey
August 19 – Jennings, Vermillion
August 20 – Howard, Shelby, Spencer
August 21 – Fayette, Greene, Parke



August 22nd – 31st

A two week spell of below normal temperatures ended on August 23rd. Such an extended run of below normal temperatures had been absent in this hot Indiana summer. These final 10 days of August opened with the daily average temperature at 4°F below normal. Fronts surrounded our state to the north and south. The southern system won out as a warm front pushed through Indiana on August 24th. Warm and humid air settled into our state over the next two days. Temperatures peaked at 4°F above normal, then began a slow 3 day slide. On August 27th a new storm system riding a stationary front arrived in Indiana. The next day the front regained momentum and moved south to Tennessee as a cold front. This front triggered showers, some heavy, as temperatures fell back to normal. A high pressure center followed the cold front, moving overhead on August 29th then east of Indiana to end the month. The warm southerly flow behind the high pressure center lifted temperatures to 3°F above normal. Overall for the 10 day interval state temperatures averaged 1°F above normal. Daily maximum temperatures typically range from 80°F to 87°F north to south across Indiana in the final week of August. Normal daily minimums should vary between 60°F in far northern counties to 64°F in the far southwest.

The only significant rain this week came when the stationary front transitioned into a cold front and passed through Indiana on August 28th. Total rainfall during this event averaged about 1.3 inch in northern Indiana, 0.9 inch in central, and 0.3 inch across southern Indiana. These 10 day totals equate to about 120% of normal in the north, 70% of normal in central sections, and just 30% of normal in southern Indiana. Locally heavy thunderstorms in west central Indiana generated high rainfall amounts as recorded by CoCoRaHS observers on the morning of August 27th. Some of these downbursts included 4.20 inches at Pine Village, 3.65 inches in Attica, and 3.60 inches measured in Otterbein. Two CoCoRaHS volunteers in West Lafayette noted 3.93 and 3.82 inches that morning. No additional rain fell over the 10 days at Pine Village, Attica, and Otterbein so these amounts also represent the interval totals at these three locations.

A reversal of the summer drought trend from worsening to improvement took hold near the start of August. The deficit in annual rainfall to the end of August stands from about 5 inches in northern Indiana to as much as 12 inches in southwest Indiana. Some localized deficits in southern Indiana have reached in excess of 16 inches. With the return of more frequent rains in August these deficits are slowly being erased.

A snapshot of the current drought status is found in the August 28th edition of the US Drought Monitor. A significant weekly change has occurred in northern Indiana where land area classified in severe drought (D2 category) has improved to moderate drought status (D1 category). There is little change elsewhere in the state drought classification. The latest map shows 11% of Indiana in exceptional drought status (D4 category), 26% in extreme status (D3 category), 44% as severe (D2 category), 17% in moderate drought status (D1 category), and 3% as abnormally dry (D0 category). An image of each weekly Indiana Drought Monitor map is included near the end of this summary.

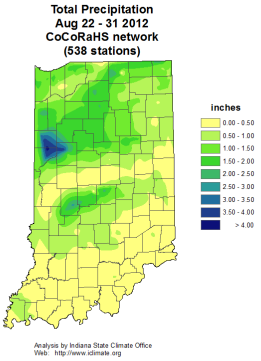
While conditions are slowly improving, impacts of the drought are ongoing. The State of Indiana continues its first ever water shortage warning asking for a voluntary reduction in water usage. There have been reports of home owner wells going dry.

Agriculture has been greatly impacted this summer but modest improvements are being seen according to the September 2nd edition of the Indiana Weekly Weather and Crop bulletin. The soil

moisture survey reveals that 64% of topsoil is now rated as short or very short of moisture. Subsoil is graded at 84% in these categories. The report notes that soybeans are benefiting from recent rains, with 20% of the crop now rated in good to excellent condition. The corn crop is rated 8% good to excellent with a third of the crop now mature. Surprisingly farmers may get one more cutting of hay this year as hay fields have responded to the latest rains with good regrowth. Pastures are rated in 8% good to excellent condition and livestock have rebounded to mostly good condition.

The threat of wildfires continues although recent rains have convinced some counties to lift long standing bans on open burning. Counties which have lifted their mandatory open burn bans over the last 10 days and the effective dates are:

August 22 – Henry, Lawrence
August 24 – Decatur, Vigo, Washington
August 28 – Johnson, Ohio, Warrick



August 2012

Temperature

Region	Temperature	Normal	Deviation
Northwest	70.8	71.6	-0.7
North Central	70.0	71.0	-1.0
Northeast	69.9	70.6	-0.7
West Central	72.3	72.8	-0.5
Central	71.9	72.2	-0.3
East Central	71.4	71.4	0.0
Southwest	75.4	75.2	0.1
South Central	74.7	74.5	0.1
Southeast	73.9	73.8	0.1
State	72.3	72.7	-0.3

Precipitation

Region	Precipitation	Normal	Deviation	Percent of Normal
Northwest	4.66	3.81	0.85	122
North Central	4.52	3.83	0.69	118
Northeast	4.23	3.68	0.55	115
West Central	5.19	3.96	1.23	131
Central	4.47	3.75	0.72	119
East Central	3.64	3.55	0.09	103
Southwest	3.17	3.67	-0.50	86
South Central	2.61	3.91	-1.30	67
Southeast	2.38	3.90	-1.52	61
State	3.95	3.79	0.17	104

Summer (June - August)

Temperature

Region	Temperature	Normal	Deviation
Northwest	73.6	71.8	1.9
North Central	73.1	71.2	1.9
Northeast	73.1	70.9	2.2
West Central	75.0	73.0	2.0
Central	74.7	72.4	2.3
East Central	74.1	71.6	2.5
Southwest	77.6	75.2	2.4
South Central	76.6	74.4	2.2
Southeast	75.7	73.6	2.1
State	74.9	72.8	2.2

Precipitation

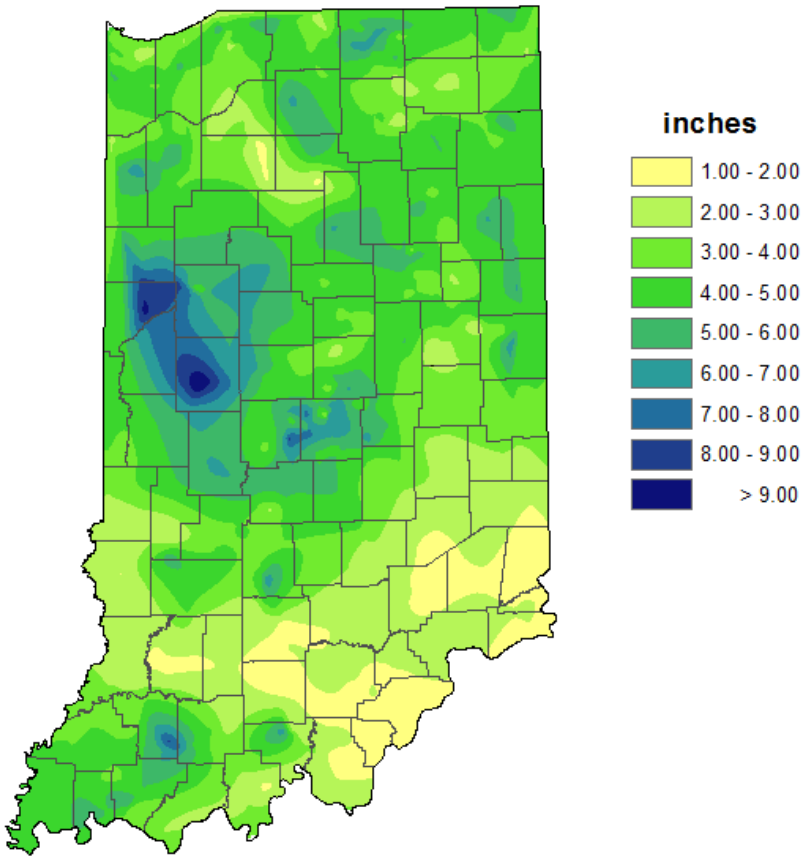
Region	Precipitation	Normal	Deviation	Percent of Normal
Northwest	10.61	12.01	-1.40	88
North Central	10.39	11.93	-1.54	87
Northeast	8.73	11.42	-2.70	76
West Central	7.10	12.68	-5.58	56
Central	7.14	12.11	-4.97	59
East Central	7.46	11.88	-4.42	63
Southwest	6.24	12.04	-5.80	52
South Central	6.45	12.32	-5.87	52
Southeast	6.23	12.23	-6.01	51
State	7.79	12.08	-4.29	64

2012 Annual (through August)

Region	Temperature	Temperature Normal	Deviation
Northwest	56.5	52.0	4.5
North Central	56.1	51.5	4.6
Northeast	55.9	51.2	4.7
West Central	58.5	53.7	4.8
Central	58.2	53.2	4.9
East Central	57.4	52.4	5.0
Southwest	61.8	57.0	4.9
South Central	60.9	56.4	4.5
Southeast	59.8	55.5	4.3
State	58.4	53.7	4.7

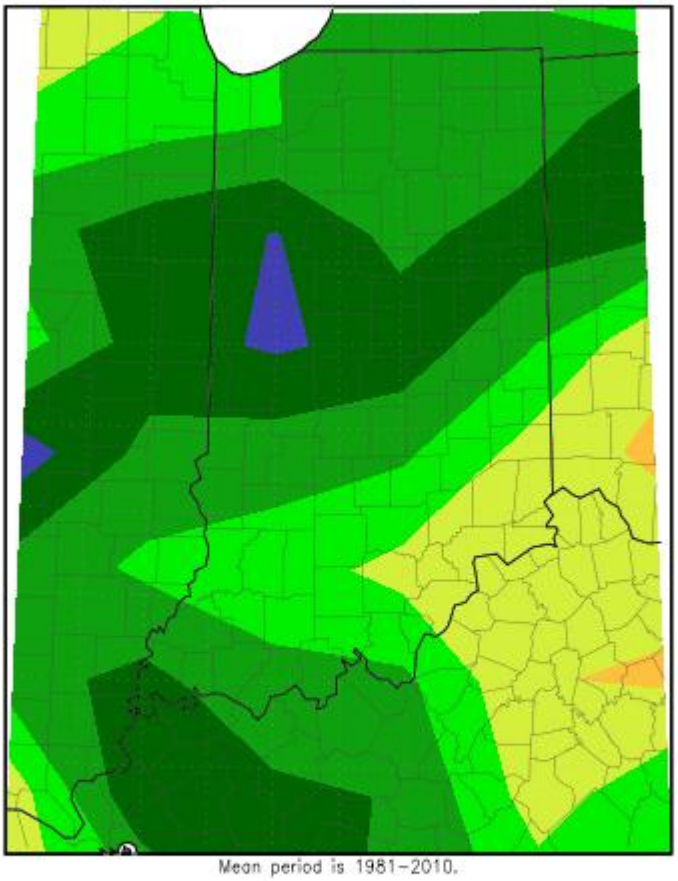
Region	Precipitation	Precipitation Normal	Deviation	Percent of Normal
Northwest	20.88	26.09	-5.21	80
North Central	20.59	26.02	-5.43	79
Northeast	19.32	25.16	-5.84	77
West Central	19.21	28.75	-9.54	67
Central	21.78	28.32	-6.54	77
East Central	20.76	27.49	-6.73	76
Southwest	19.40	31.58	-12.18	61
South Central	23.46	31.94	-8.47	73
Southeast	23.96	31.06	-7.10	77
State	20.96	28.55	-7.59	73

Total Precipitation
August 2012
CoCoRaHS network
(532 stations)



Analysis by Indiana State Climate Office
Web: http://www.iclimate.org

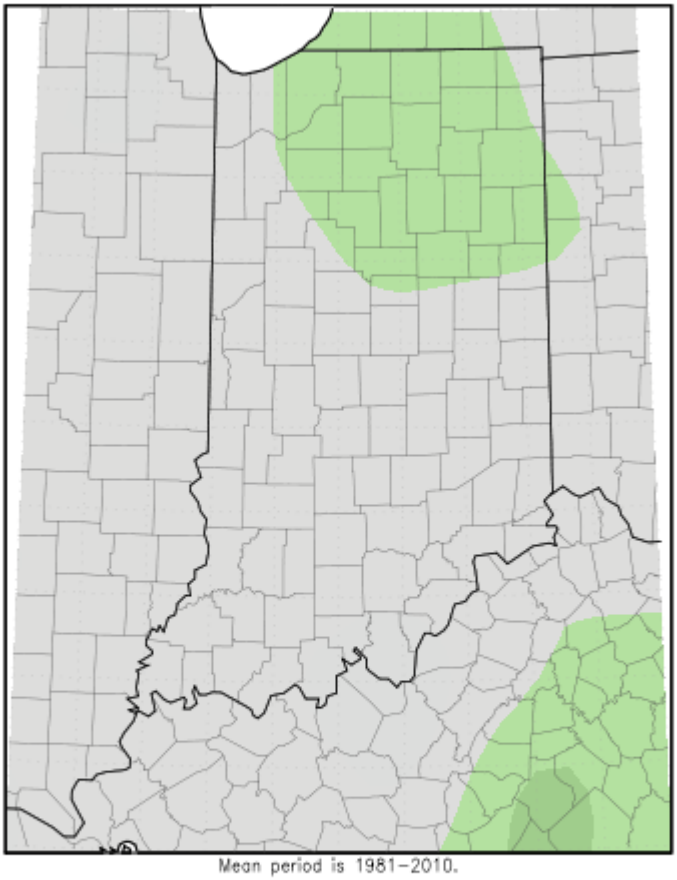
Accumulated Precipitation: Percent of Mean
August 1, 2012 to August 31, 2012



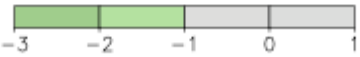
Mean period is 1981–2010.

Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana–Champaign

Average Temperature (°F): Departure from Mean
August 1, 2012 to August 31, 2012



Mean period is 1981–2010.

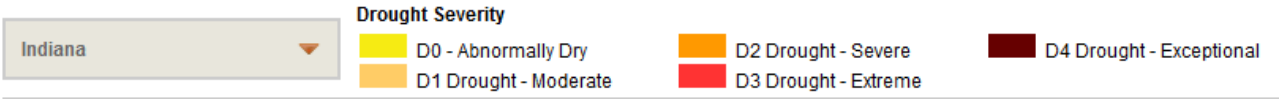


Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana–Champaign

Drought Summary from the U.S. Drought Monitor

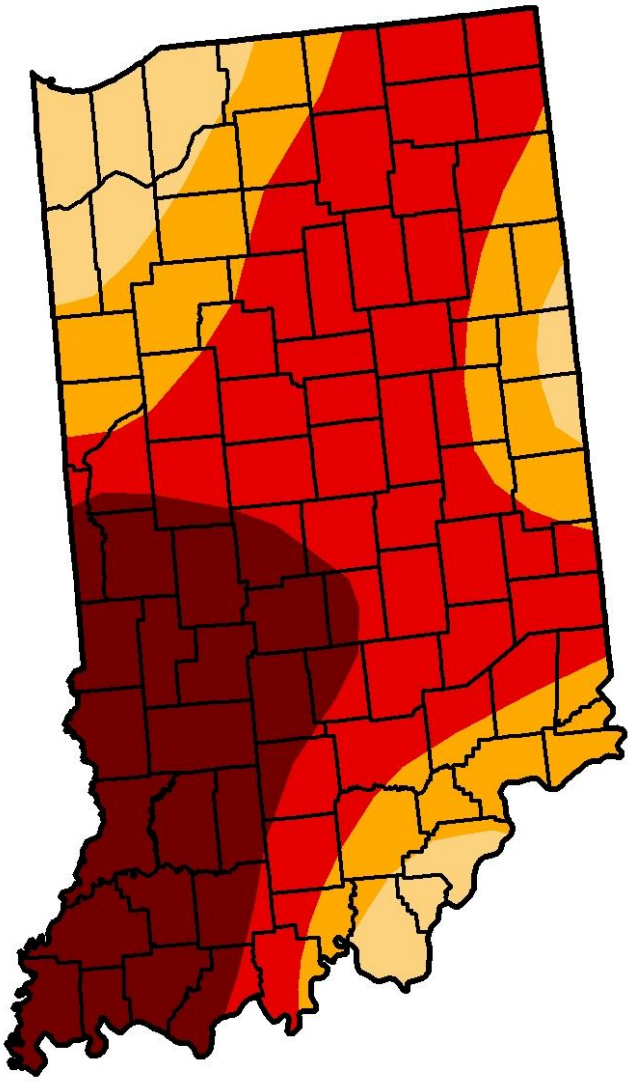
Below is a drought summary for the state of Indiana from the U.S. drought monitor. Areas in white are not experiencing any drought. Yellow areas are abnormally dry, but not entirely considered a drought. Drought begins when the moisture levels become more severe, with beige, orange, red, and brown indicating increasing levels of drought (moderate, severe, extreme, and exceptional, respectively). The table below indicates how much of the state is not under drought conditions, and also how much of the state is under drought conditions from its respective column upwards.

For example, August 7th has 68.6% of Indiana under at *least* D3- D4 drought status, 89.8% under at *least* D2-D4, and 100.0% under D1-D4. Subtracting the D3-D4 category (68.6%) from the D2-D4 category (89.8%), tells us that 21.2% of Indiana is in the D2 category alone (severe drought). Please note, however, that these areas are not exact, and much of this drought map has been created from reports throughout the state and in estimation, so use this information as a general view rather than for specifics.

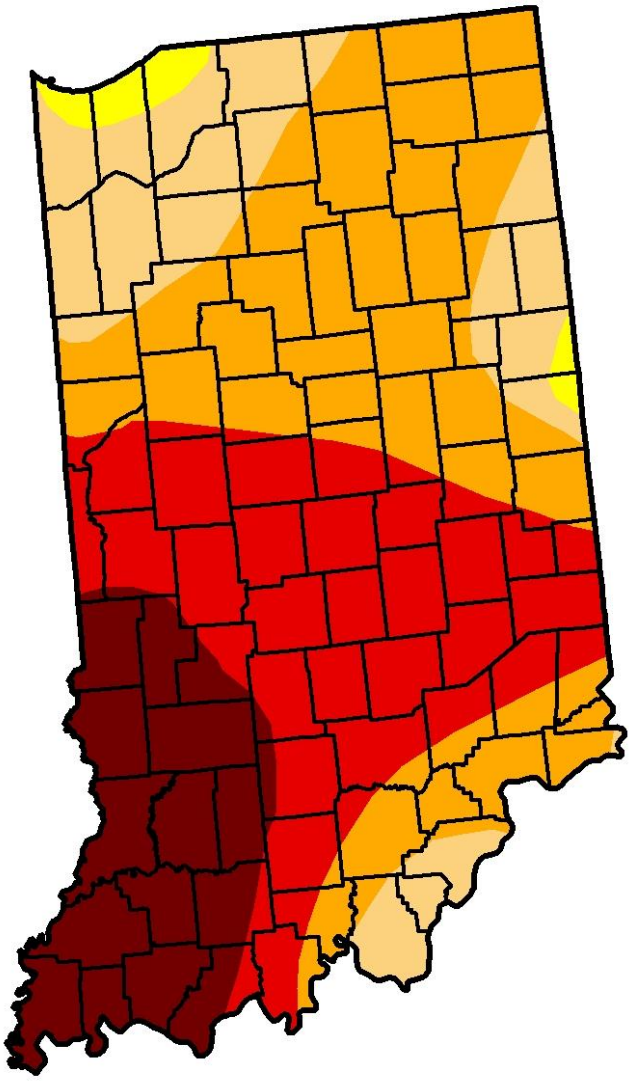


Week	Nothing	D0-D4	D1-D4	D2-D4	D3-D4	D4
August 28, 2012	0.00	100.00	96.94	64.07	39.22	10.80
August 21, 2012	0.00	100.00	98.14	81.48	37.09	10.77
August 14, 2012	0.00	100.00	98.16	81.43	46.30	16.63
August 7, 2012	0.00	100.00	100.00	89.75	68.56	25.00

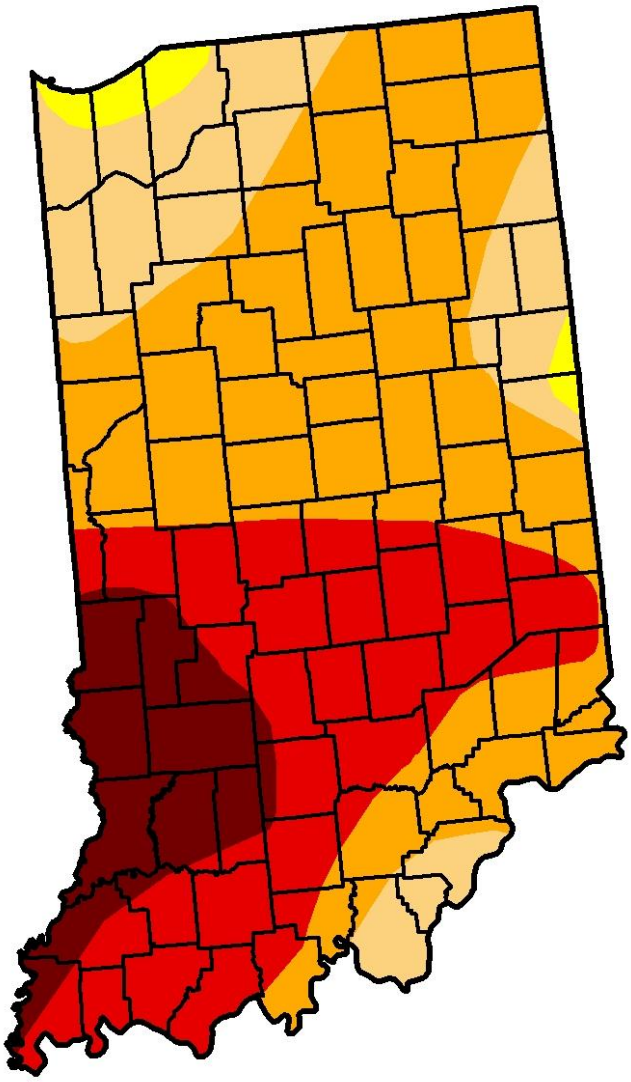
August 7th Drought Summary



August 14th Drought Summary



August 21st Drought Summary



August 28th Drought Summary