Pest & Crop Newsletter

Purdue Cooperative Extension Service and USDA-NIFA Extension IPM Grant

This work is supported in part by Extension Implementation Grant 2021-70006-35390 / IND90001518G-1027053 from the USDA National Institute of Food and Agriculture and NCR SARE Award GNC20-311

In This Issue

- July Forage Considerations
- Variable Temperatures, Sporadic Rainfall, And Growing Drought

July Forage Considerations

(Keith Johnson)

As we transition into a new month, it is always good to remind ourselves about forage management practices that remain or become a focus. Below are forage management practices that transition from other months or are first noted for this time of year.

- Take soil tests so proper amount of lime and fertilizers can be applied.
- Continue scouting for potato leafhopper in alfalfa fields. This
 insect stunts growth and reduces yield. Insecticide application
 should be applied when the economic threshold occurs. A "rule
 of thumb" that I use is .1 leafhopper per inch of plant height per
 sweep with a 15-inch diameter sweep net. Harvest is another
 option if economic threshold has been reached and the crop is
 ready to be harvested.
- Seed adapted summer-annual grasses, legumes, and brassicas as a double crop pronto after harvesting soft red winter wheat or spring oat grain. This task should be completed before mid-July.
- Do not overgraze. Residual height should be no less than 4 inches with cool-season grass and cool-season grass/legume pastures.
- Provide supplemental forage during periods of low pasture production.
- Remove livestock from cool-season grass pastures and turn them out on summer-annual grass pastures, if available and ready to be grazed.
- Purchase forage seed to be sown in August from a knowledgeable seed company. Make sure the forage is adapted to the selected site.
- Remember to purchase the specific rhizobia inoculant for the legume to be seeded so legumes can fix their own nitrogen.
- Cut hay if ready for harvest.
- Northern Indiana: Till fields intended for an August seeding of perennial cool-season grasses and alfalfa. Incorporate recommended fertilizer that has been determined by a soil test.
- If you typically buy hay for winter feeding, consider buying it out of the field from a local producer now. Prices are typically lower now than in the winter.
- Cut brush and unwanted trees in pastures. Treat stumps with a herbicide labeled for the control of regrowth.

Being timely with implementation of management practices is critical for most success. Develop a plan and follow through so most opportunity of success can occur. An excellent source of forage information is the Purdue Forage Field Guide. Forage Field Guide, fourth edition (purdue.edu)



Seeding a warm-season annual grass like sorghum-sudangrass in early July can supply excellent grazing in September. (Photo Credit: Keith Johnson)

Variable Temperatures, Sporadic Rainfall, And Growing Drought

(Owen Rahman, Intern, Indiana State Climate Office)

Happy Independence Day from the Indiana State Climate Office!

Temperatures were much more pleasant over the past seven days (June 24-July 1) compared to the heat experienced in mid-late June. Across Indiana, temperatures varied from below to above normal from north to south (Figure 1). Southern Indiana had locations with temperatures up to 1°F above normal, while south-central Indiana observed near-normal temperatures. Areas north of Indianapolis had locations averaging 2-3°F below normal. Minimum temperatures were largely normal for the week (Figure 2, left), whereas maximum temperatures were well below normal for some (Figure 2, right). The largest maximum temperatures anomalies occurred in the northern third of the state, with temperatures 3-4°F below normal.









Figure 2. Left – Average minimum temperatures for June 24-July 1, 2024 represented as the departure from the 1991-2020 climatological average. Right – Average maximum temperatures for June 24-July 1, 2024 represented as the departure from the 1991-2020 climatological average.

Growing degree days (GDDs) since April 1st remain above normal for Indiana (Figure 3). Northwestern Indiana is 100-150 GDDs above normal as of July 1, while the rest of the state is 150-200 units above normal.



Figure 3. Left – Growing degree days since April 1st. Right – Growing degree days departure from normal since April 1st

Precipitation was sparse for many across the state this past week but

heavy for some (Figure 4, left). Southern and western portions of the state received below-normal precipitation, less than 75 percent of normal (Figure 4, right). One area south of Terre Haute received less than 50 percent of normal rainfall. Williams 3 SW, located in Martin County, had no measurable rainfall this week, earning the title of the driest station in the state. Northeastern portions of the state received above-normal rainfall, with extreme northeast Indiana receiving almost double their normal rainfall. Rochester 2.4 NW, located in Fulton County, recorded 3.14 inches of rain for the week, the highest total in the state.



Figure 4. Left – Accumulated precipitation for June 24-July 1. Right – Accumulated precipitation for June 24-July 1 represented as the percent of the 1991-2020 climatological average.

Drought has increased as of late, particularly in southern Indiana (Figure 5). The recent lack of rainfall in southern portions of the state has resulted in moderate drought (D1) developing in southeast and west-central Indiana. There was no moderate drought anywhere in the state last week, indicating worsening conditions, especially in southern Indiana. Most other counties in the state, with the exception of the northern and southern fringe counties, are experiencing abnormally dry (D0) conditions.



Figure 5. June 25 US Drought Monitor map.

Looking ahead, conditions look to heat back up. Temperatures are expected to be above normal over the next 7 days, particularly in southern Indiana. Precipitation forecasts hint at slightly above-normal rainfall-a welcomed relief for many.

It is the policy of the Purdue University that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue is an Affirmative Action Institution. This material may be available in alternative formats. 1-888-EXT-INFO Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.