

The interactive Timeline feature provides enhanced weather-related crop development information offering greater insight to make more informed crop management decisions. Visible Timeline components include Temperature, Precipitation, Degree Days, Growth Stage, Field Activities, and Nitrogen Monitoring.

Tracking is available up to 11 months in the past. Predictive forecasting is available up to 11 months in the future on Advantage Acre Plus accounts. (Forecast is 15 days out on free accounts) Advantage Acre has partnered with WeatherTrends360 to provide this unique information and insight.

## Timeline Access

After a field is selected from the left panel, the Timeline will automatically drop down from the top of the screen. It can be closed and re-opened at any time while a field is selected by clicking on the **Timeline Tab**. (Figure 1)

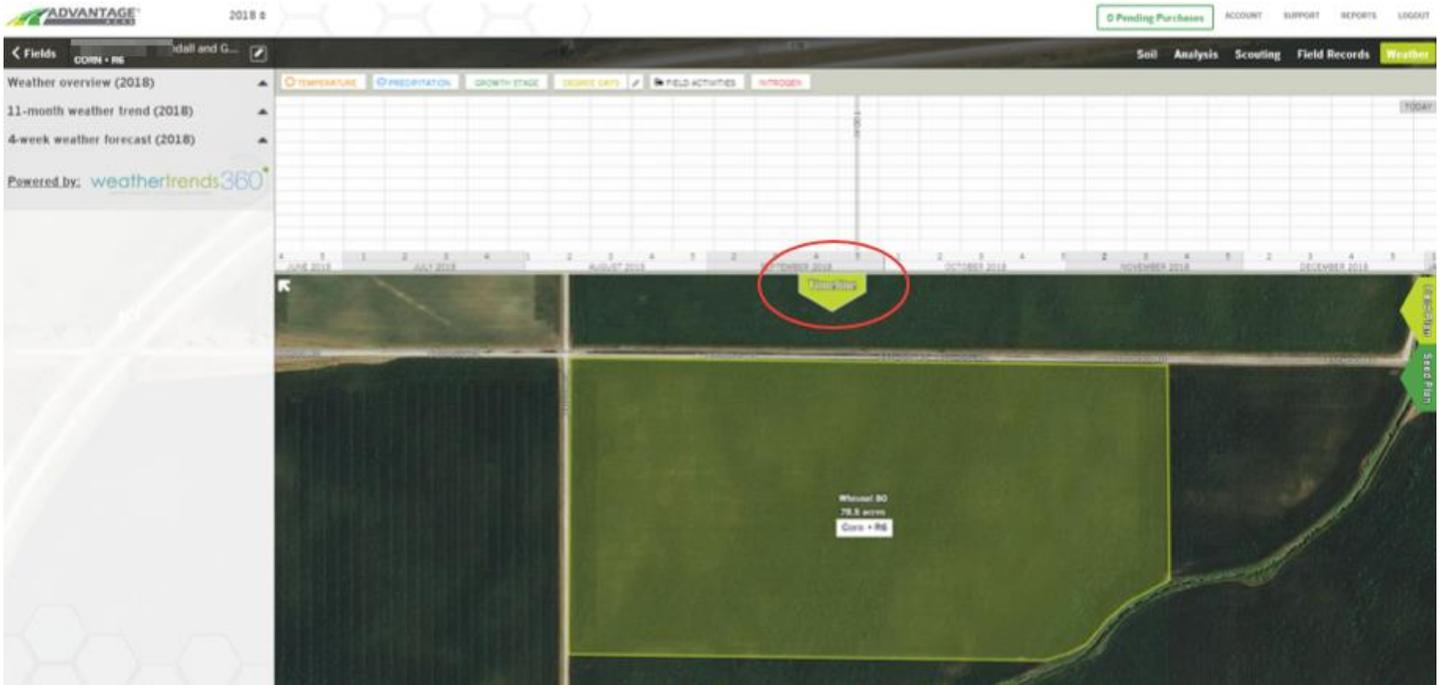


Figure 1: Opening and Closing the Timeline

## Features within the Timeline

**Temperature** – Click the orange **Temperature** button to view temperature ranges. The orange scale is displayed on left axis, indicating high and low temperatures. The orange bars to the left of the gray TODAY line shows the actual high and low temperature by day. The faded orange bars are a projected high and low temperature forecast by day. Hovering the cursor over each orange bar will display the temperature range for that day.

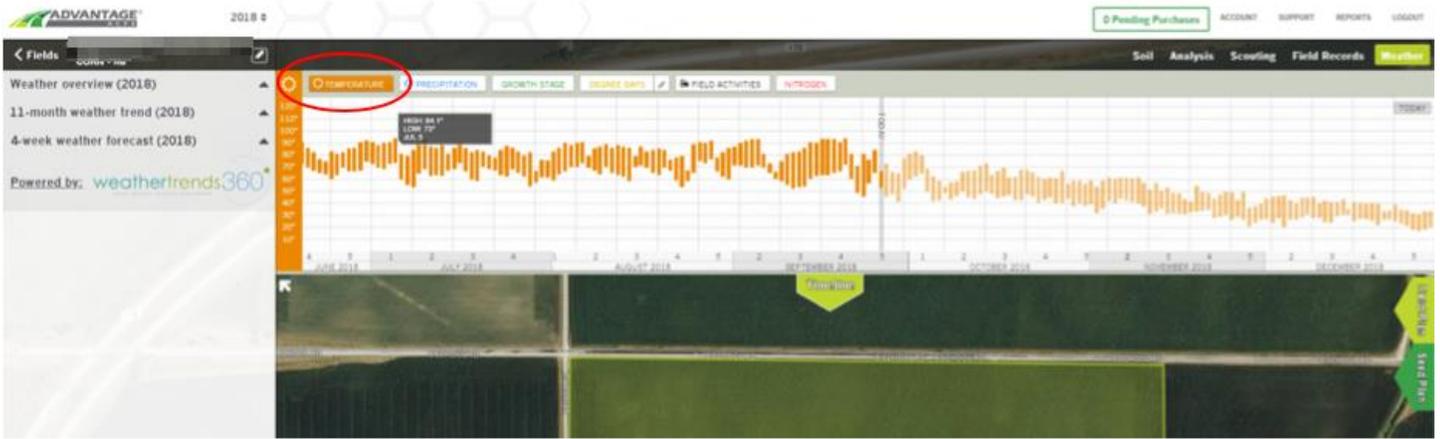


Figure 2: Temperature Button and Displayed Ranges

**Precipitation** – Click the blue **Precipitation** button to view in the timeline. The blue temperature scale is displayed on left axis, indicating inches by increment range. The blue columns to the left of the gray TODAY line show the actual precipitation by day. The faded blue columns are a projected forecast, by day for 15 days (thin line), then by week (wider column) as part of the 11-month forecast. Hovering the cursor over each blue bar displays the date with precipitation for that day or week.



Figure 3: Precipitation Button and Displayed Precipitation Amounts

**Growth Stage** – Click the green **Growth Stage** button to view the projected growth stage of the product selected for that field. A product must be selected in the seed plan for this to be viewed. The green lines provide estimated growth stages by date. The growth stage is labeled at the top of the green line. The growth stage will not work with a custom hybrid or variety, only those that are in the product library. If there are multiple products in a given field, the growth stage estimate is based upon relative maturity of the first listed hybrid or variety in the field’s seed plan and the planting date. Growth Stage may be revised with the scouting app. The growth stage can only be used to estimate the corn and soybean growth stages.

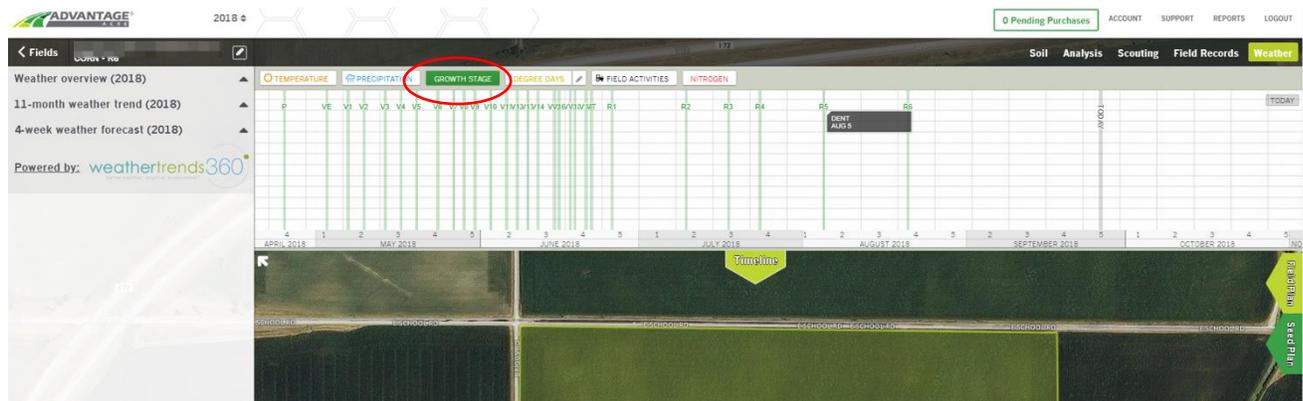


Figure 4: Growth Stage Projections

**Degree Days** - Click the gold **Degree Days** button to activate. Gold GDD scale is displayed on left axis, indicating GDD by increment range. The planting date for the crop must be selected for the GDD scale to work. The gold line and shaded area display estimated GDD accumulation to the left of the gray TODAY line and predicted GDD accumulation in the faded gold line and shaded area to the right. Hovering the cursor over the gold line displays the date and accumulated GDD's by that date.



Figure 5: Growing Degree Days

The GDD Calculations may be edited by clicking on the pencil icon on the gold **Degree Days** button, revising the upper and/or lower temperature limits used to calculate GDD's. Select **Update** to save revisions or **Cancel** to return to default.

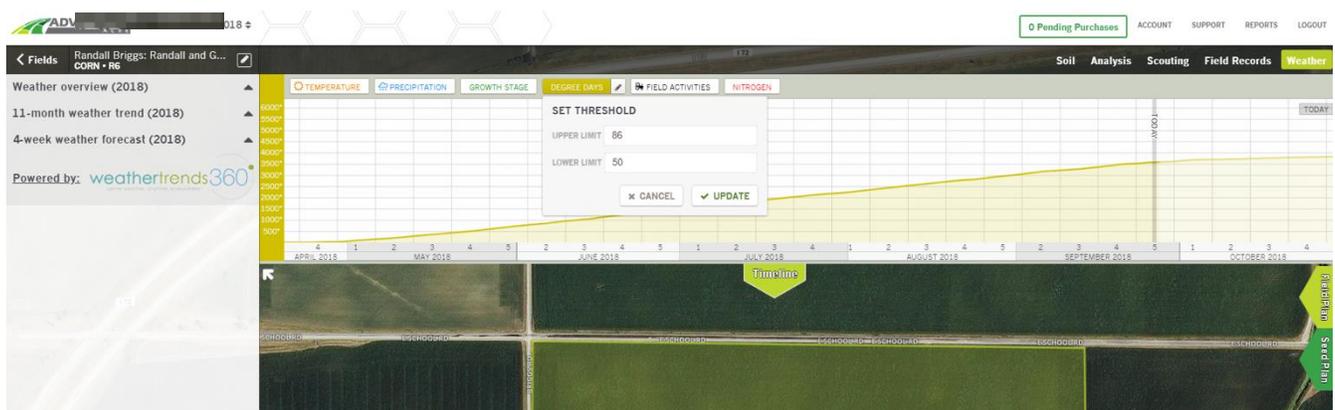


Figure 6: Setting Growing Degree Day Threshold

**Field Activities** - Click the black **Field Activities** button to activate. This will display any field activities entered into Field Records or field and seed plans by date with black lines. Includes planting, tillage, fertilizer, spraying, irrigation, and harvest. A letter 'P' ahead of an activity signifies the activity is planned. A letter 'C' means the activity is complete. Hovering the cursor over the black line displays the details of the field activity.

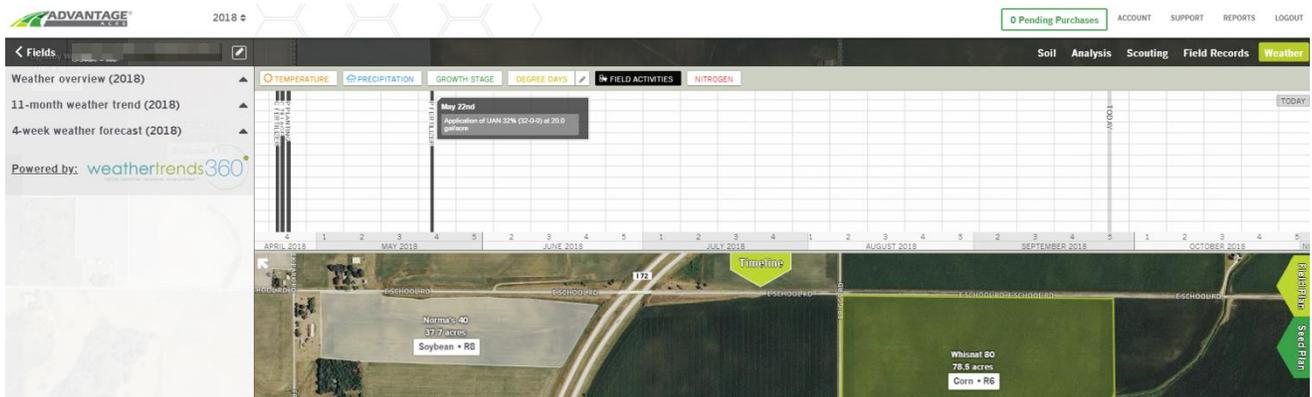


Figure 6: Planned and Completed Field Activities

**Nitrogen** - Click the red **Nitrogen** button to activate the nitrogen timeline tool. The scale is displayed on left axis in pounds of nitrogen available for plant uptake. ( $\text{NO}_3$  and  $\text{NH}_4$ ) The nitrogen line then shows how much nitrogen is available for plant uptake during the growing season. Hovering the cursor over the line displays the date and estimated nitrogen level available for plant uptake at that time.

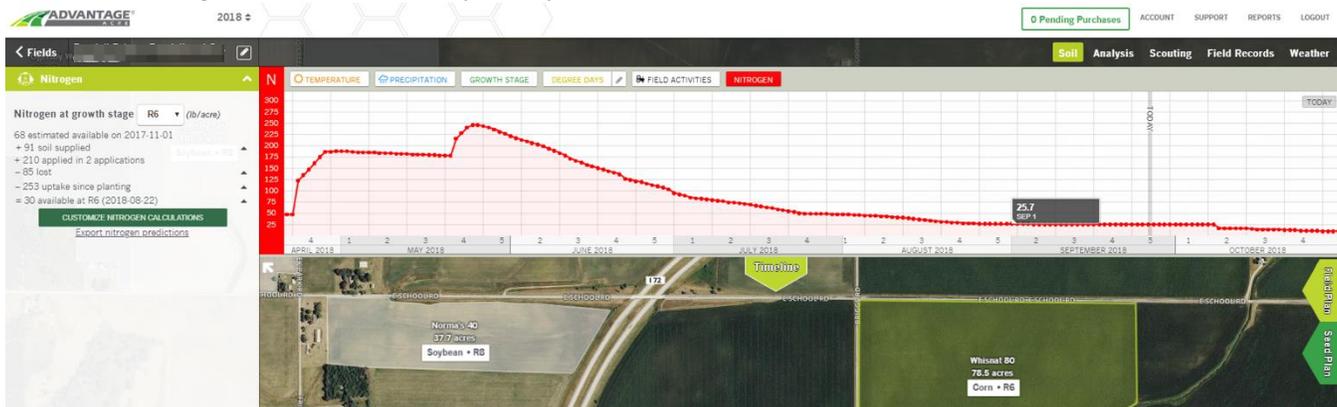


Figure 7: Viewing Available Nitrogen

**Tool Integration** - Click all or as many buttons as desired to activate each display at the same time, and in relationship with each other. This allows for both tracking and prediction of crop development in conjunction with the weather that impacts growth stages, and the implications that weather had, or will have, on plant health and yield. Tracking and planning field activities, such as nitrogen fertilizer, offers additional insight to conduct more accurate analysis, and build better field and seed plans for the future. Hovering the cursor at an intersection of the growth stage and GDD line will display the date and accumulated GDDs needed to achieve that stage.



Figure 7: Utilizing Multiple Tools Together in the Timeline