Holyoke Catholic High School


Result Statement: This graph shows that the growing season started around April 25, for two years in 2013 and 2015 and April 5, in 2012. All of the leaves fully opened in every year.


Result Statement: This graph shows that the leaves started budding around April 10 and April 25. The leaves grew the most in 2012 getting to over 8 cm by May 21 . In 2015 they only reached 7 cm by the end of the season on May 27.

## Holyoke Catholic High School



Result Statement: The trees growing season ended the earliest in 2012 on Oct. 25 and the latest in 2015 Oct 13. In 2014 the growing season ended near Nov. 1.


Result Statement: This graph shows that the trees growing season ended by Oct. 3 in 2012 and 2014 when the tree was $100 \%$ not green. In 2015 the tree stopped growing near Oct. 15 when the tree was no longer green. All the trees reached $100 \%$ not green.

Responses to question prompts in order to help students with the process of analysis.

1. The first budburst was on April 5, 2012. The first to fall off was the 2012 data when they fell off around October 29. The last to fall off was the around November 10, 2015.
2. The other trees data compared to mine budded faster than mine. The data went up faster than mine in 2012. All of the other data was fully budded faster than mine even though my tree started budding first.
3. In the spring the trees leaf length got shorter from 2012 to 2015 going from 10 cm to 7 cm in 2015.


This graph shows that the $4^{\text {th }}$ Hawthorn had its longest growing season during the 2012 season when it got to about 190 days. There was no data for this tree in 2013 or 2014. In 2015 the growing season reached around 175 days. The next tree, the $3^{\text {rd }}$ hawthorn, also had its longest growing season in the 2012 season when its reached almost 180 days. The 2013 season the trees growing season got to around 170 days. In 2014 it also only got to about 170 days. In 2015 the tree had a longer growing season with 175 days.

## Conclusion Story of Hawthorn 4:

After four years of studying the tree Hawthorn 4, different groups of students have observed the trees growing season. Different groups of students have taken the data from the tree. The tree started out budding on April 25, 2012 in the spring. The growing season lasted for about 190 days. The leaf length got to over 9 cm when the growing season ended around October $3^{\text {rd }}$. All the leaves fell by October 25. The next year in 2013 the buds opened up later on April 25. There is no more data for that season. No data was collected in the spring of 2014, but in the fall of 2014 the leaves fell by November $1^{\text {st }}$. The
growing season ended when the whole tree was $100 \%$ not green on October $5^{\text {th }}$. The next year in 2015 the tree started budding on April $27^{\text {th }}$ and finished budding by April $30^{\text {th }}$. That year the leaf length got to about 6 cm . In the fall of 2015 the leaves started falling on October $14^{\text {th }}$ and finished falling by November $14^{\text {th }}$. The whole tree was $100 \%$ not green by October $14^{\text {th }}$. The longest growing season was in 2012 when it lasted 193 days. The shortest growing season was in 2015 when it lasted for 183 days.

