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# CHNS 2025 Phenology

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# ChiNats Phenology

- Phenology is the study of the timing of life cycle events at the population level.
  - This is especially important with climate change impacting our wildlife.
  - Since 2006 Chi Nats members have recorded Phenology Data of 12 lifecycle events.
  - For each of the 12 indicator events a graph is provided.
    - Each graph shows the first observation for each year sampled
    - A regression line, non of which are statistically significant, has been added to each graph to show a possible long term trend.
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# Which lifecycle events are recorded ?

- First appearance in local area of :
    - Chiff-chaff
    - Brimstone butterfly
    - Honey bee
    - Frog spawn
    - Orange tip butterfly
    - Swallow
    - Large red damselfly
    - Swift
    - Cuckoo
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# Which lifecycle events are recorded ?

- First flowering of :
  - Primrose
  - Hawthorn
  - Horse Chestnut





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# 2025 Climate

- The spring of 2025 was the warmest on record for all four nations of the UK since records began in 1884.
  - It was the fourth sunniest spring on record for the UK, compared to the dull spring of 2024.
  - The summer of 2025 was the average warmest on record, although 1976 holds the record for the highest average summer maximum
  - 2025's hot summer was made 70 times more likely by human induced climate change.
  - We would naturally expect to experience a summer this hot approximately every 340 years. With human induced climate change this repeat period is approximately every 5 years.
  - Met Office website.
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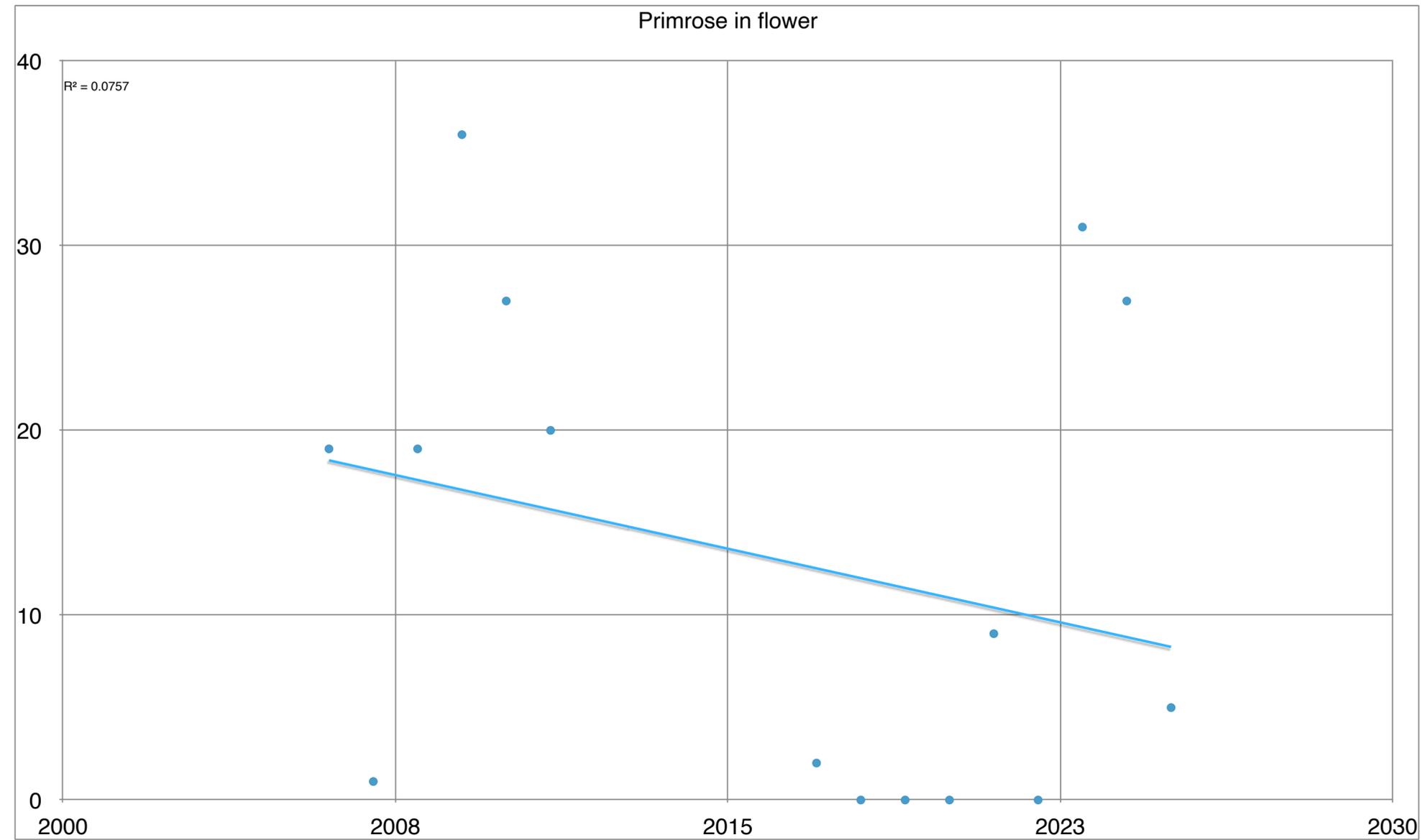
# 2025 Notes

- 7 observers submitted records (down from our high of 17).
- Have slightly altered the method of analysis to use first recording by any member rather than average of first recordings.



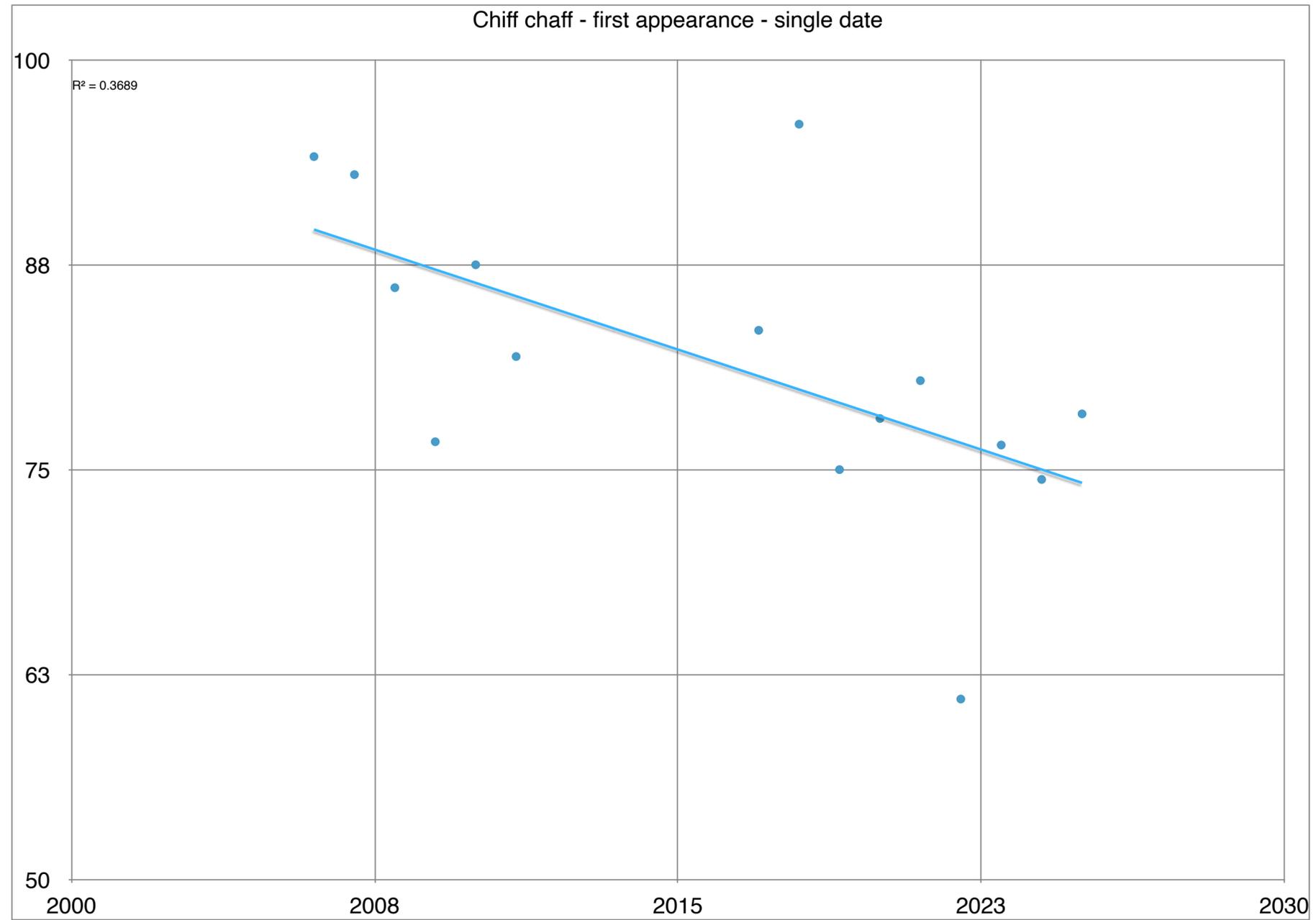
# Primrose

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
<b>Mar 31st</b>	<b>91</b>
<b>Feb 29th</b>	<b>60</b>
<b>Jan 31st</b>	<b>31</b>



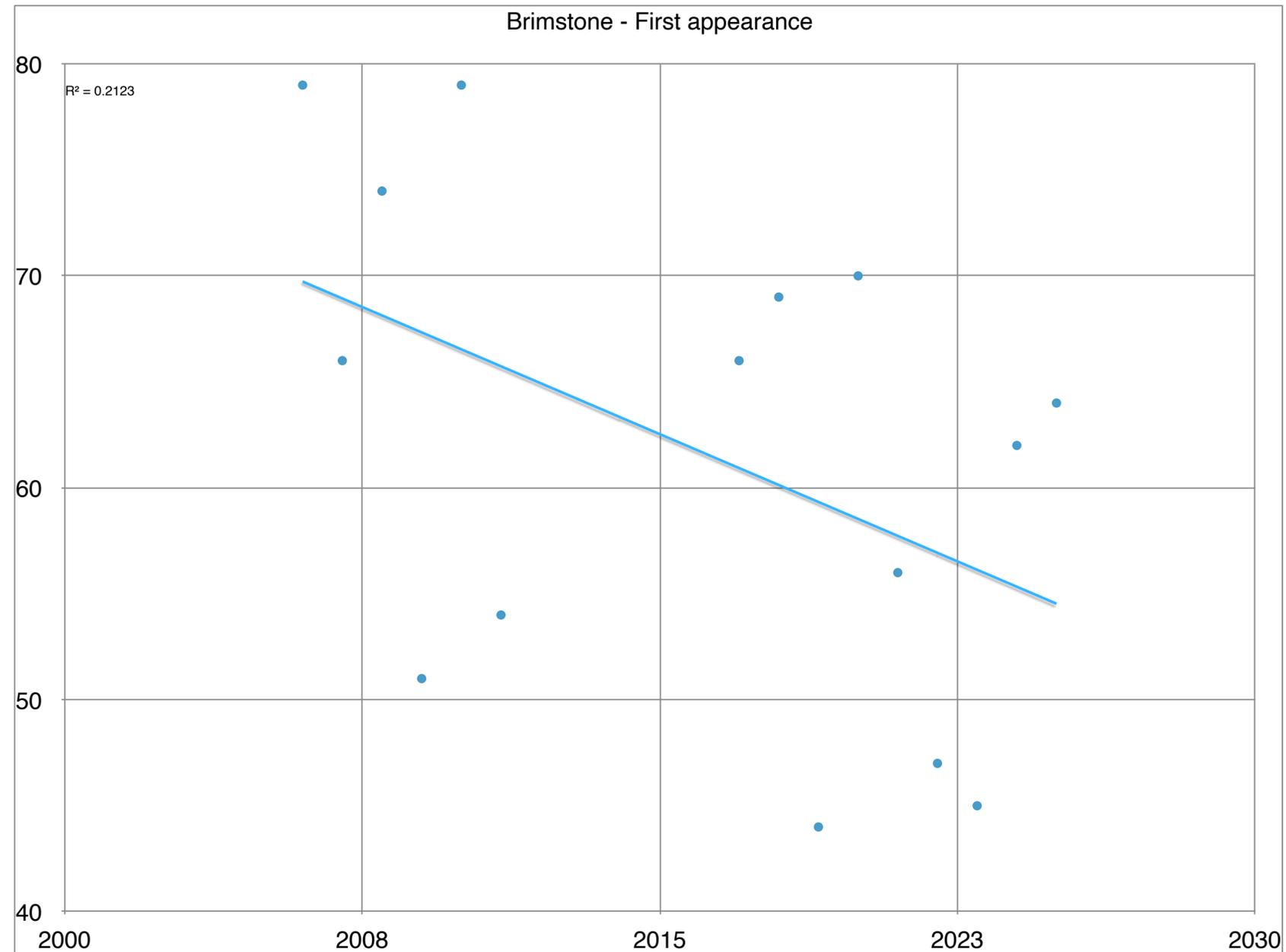
# Chiff Chaff

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
<b>Mar 31st</b>	<b>91</b>
<b>Feb 29th</b>	<b>60</b>
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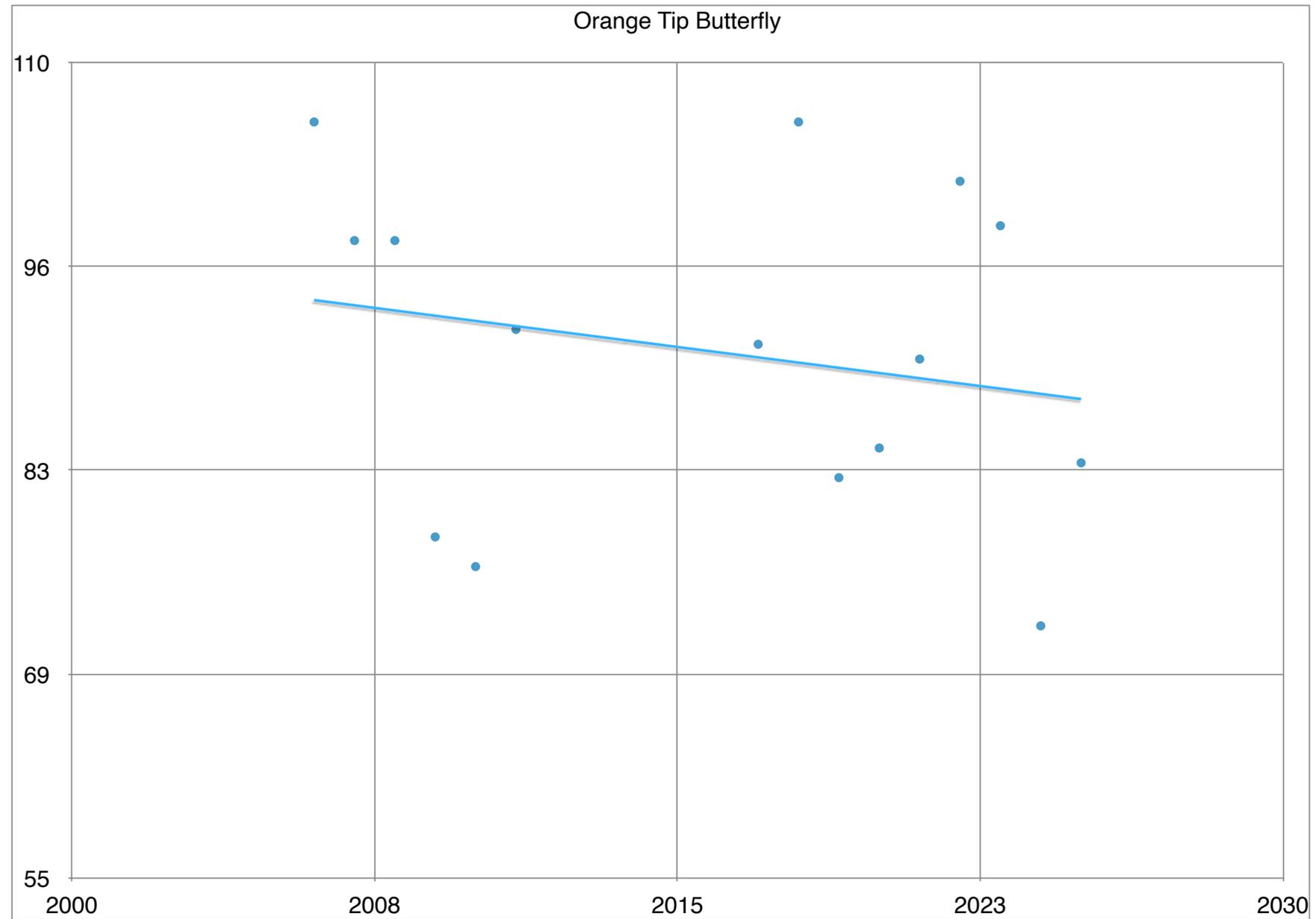
# Brimstone Butterfly

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
<b>Mar 31st</b>	<b>91</b>
<b>Feb 29th</b>	<b>60</b>
<b>Jan 31st</b>	<b>31</b>



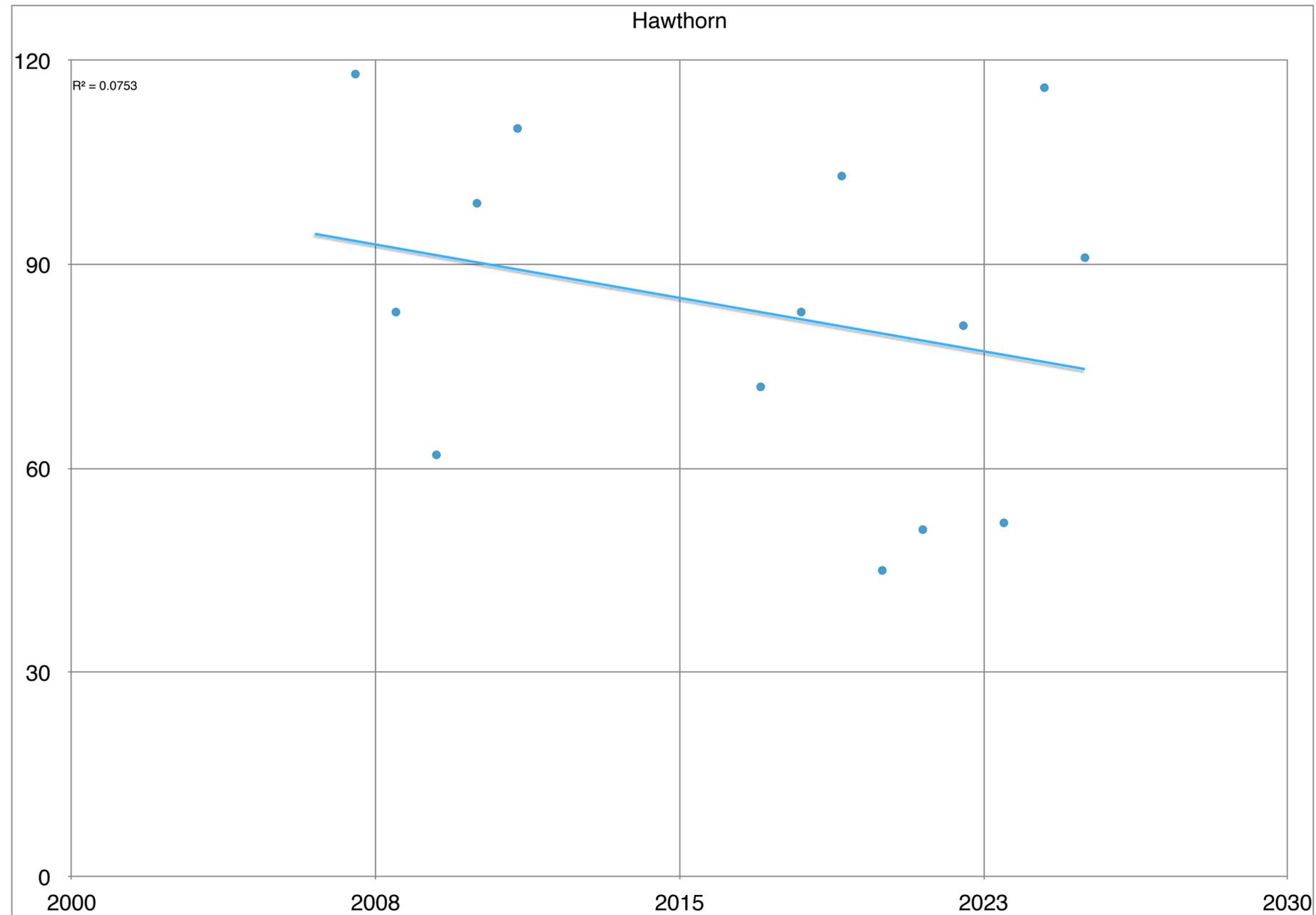
# Orange Tip Butterfly

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
<b>Mar 31st</b>	<b>91</b>
<b>Feb 29th</b>	<b>60</b>
<b>Jan 31st</b>	<b>31</b>



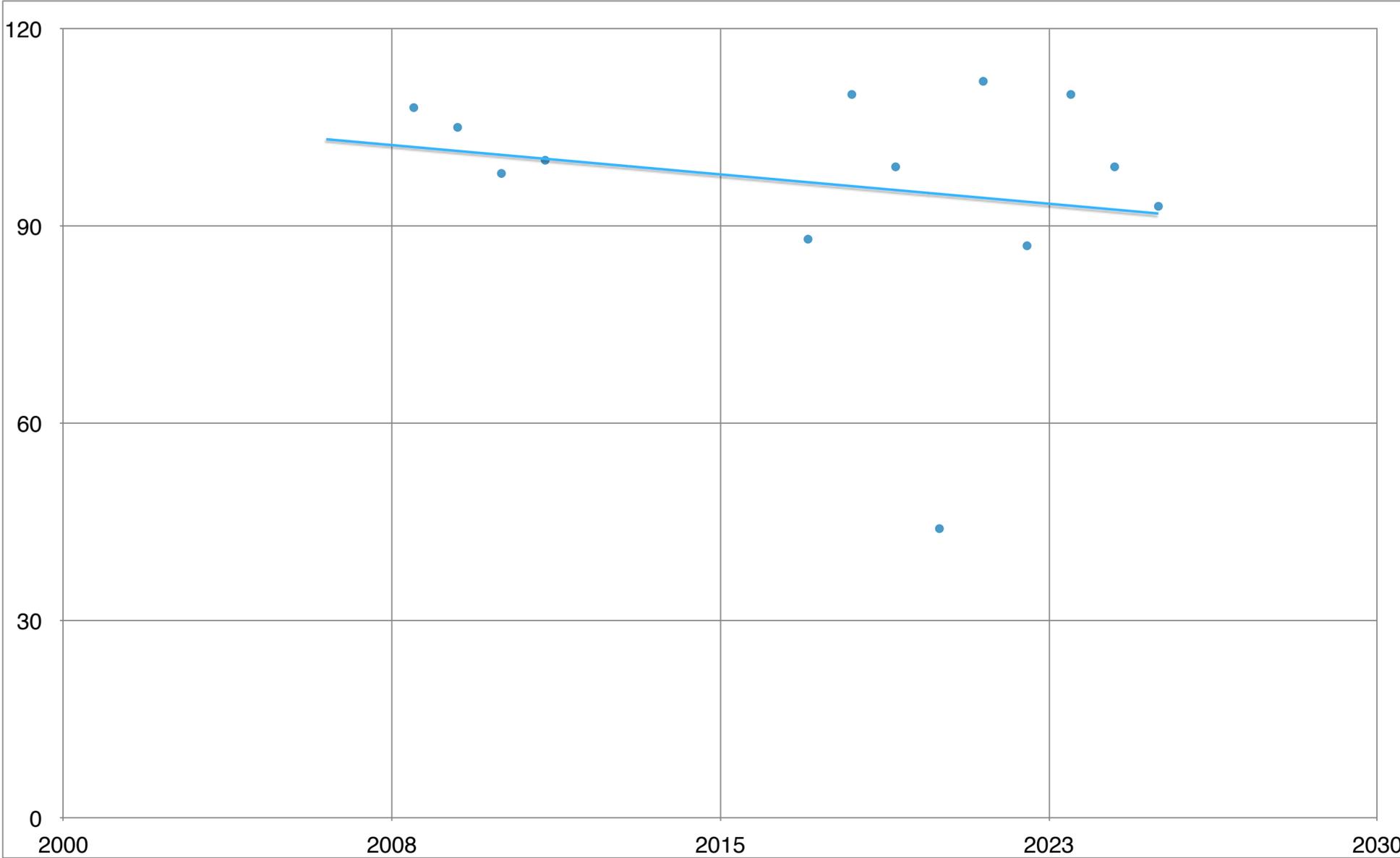
# Hawthorn in Flower

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
<b>Mar 31st</b>	<b>91</b>
<b>Feb 29th</b>	<b>60</b>
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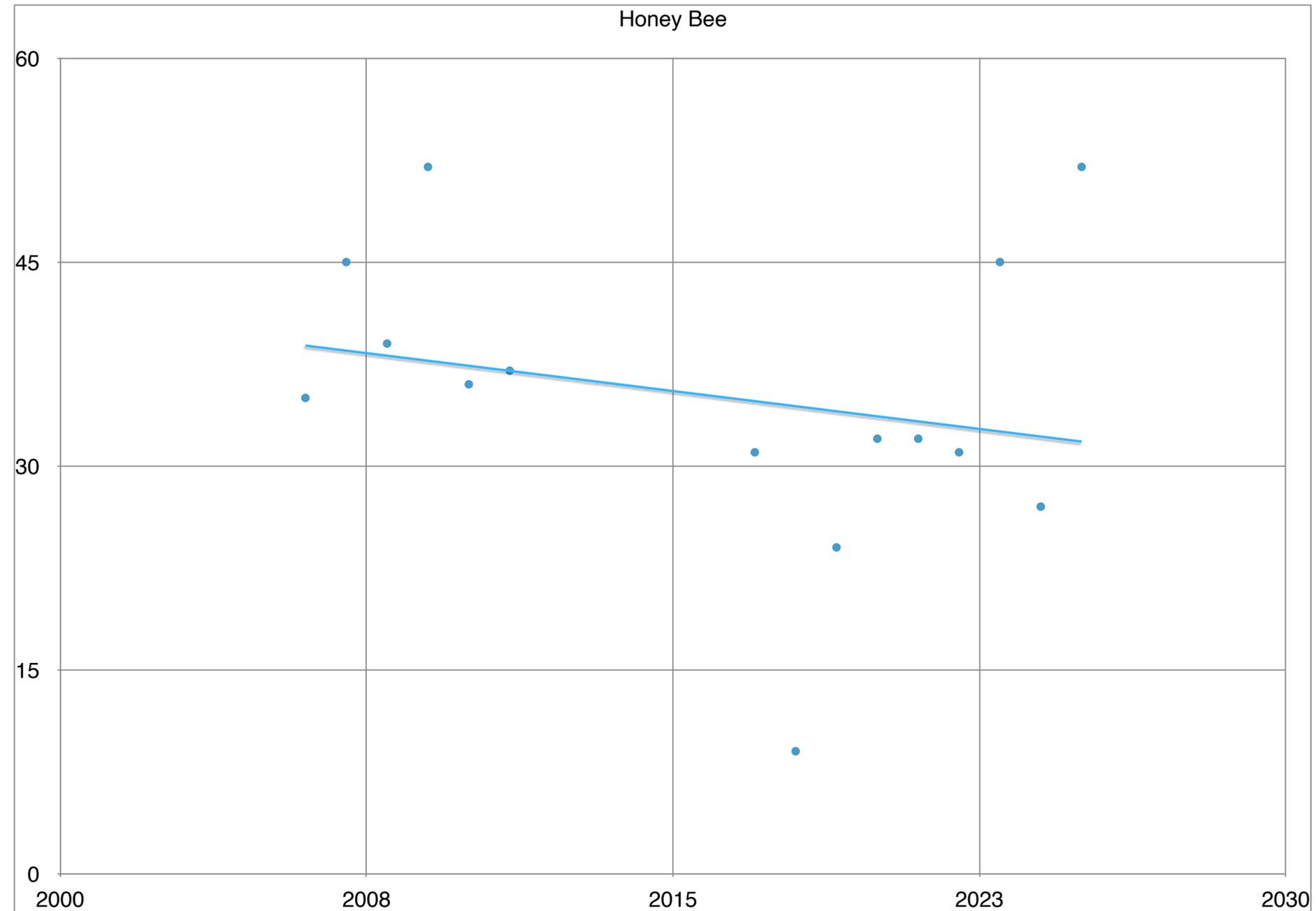
# Horse Chestnut in Flower

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
<b>Mar 31st</b>	<b>91</b>
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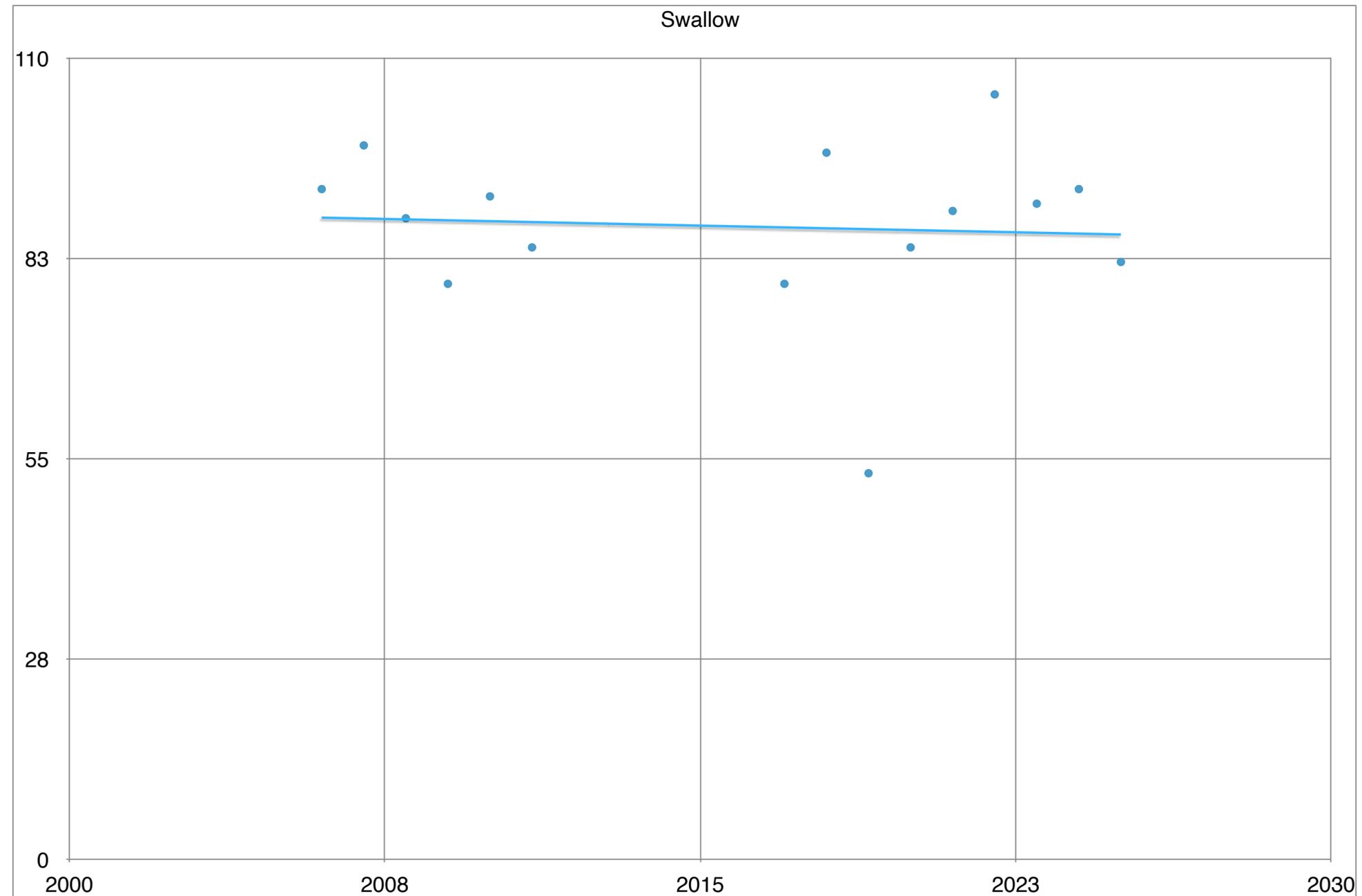
# Honey Bee

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
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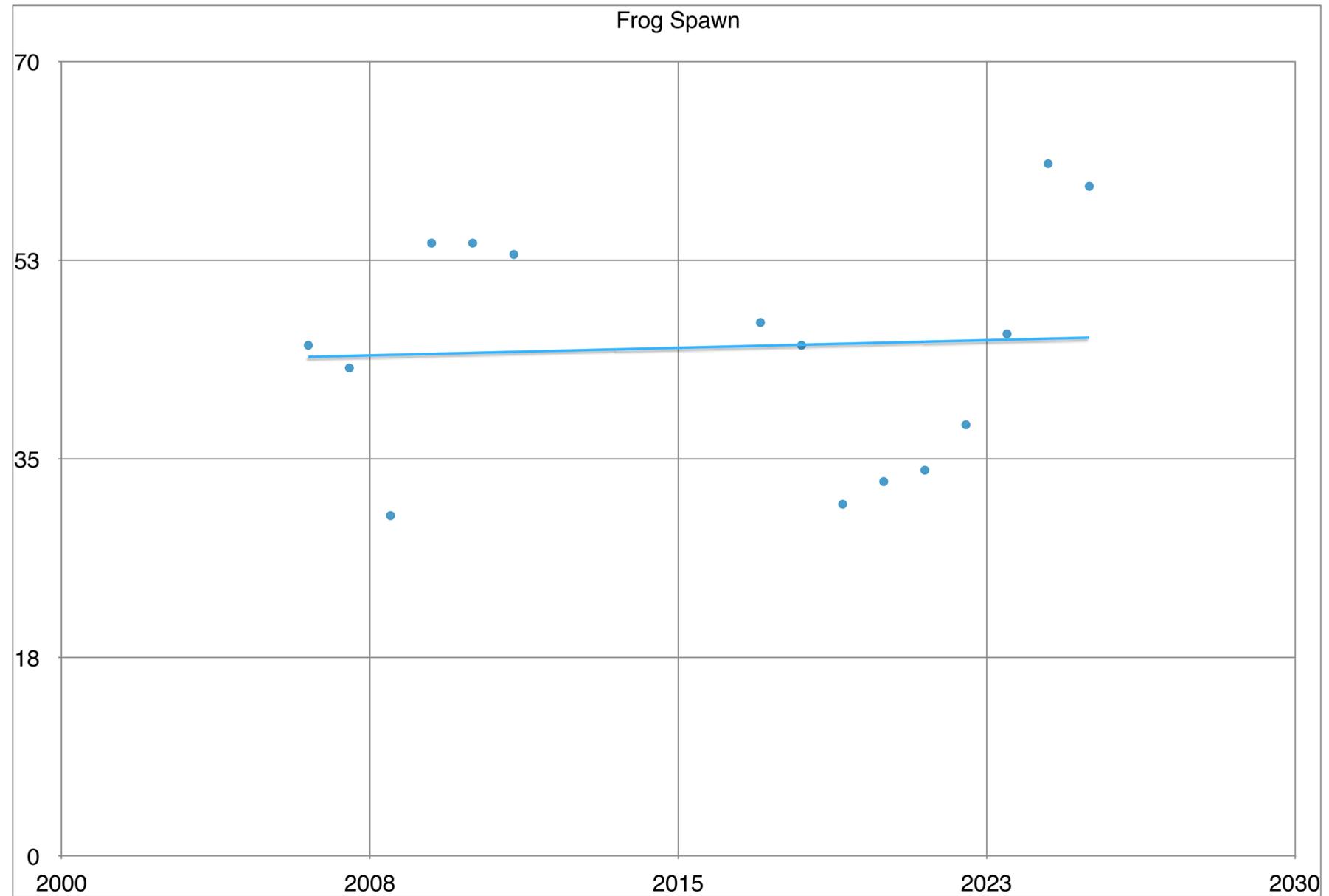
# Swallow

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
<b>Mar 31st</b>	<b>91</b>
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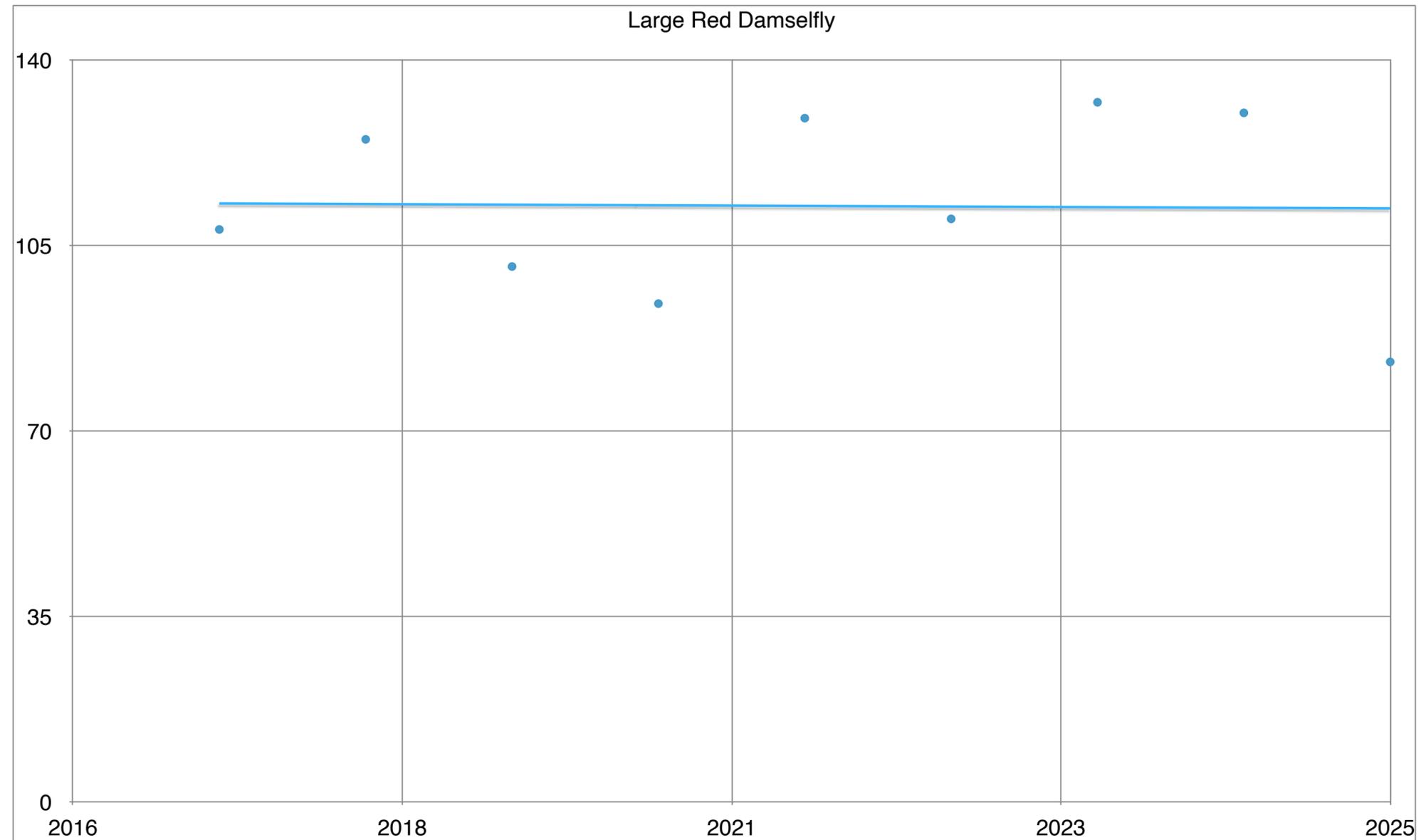
# Frogspawn

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
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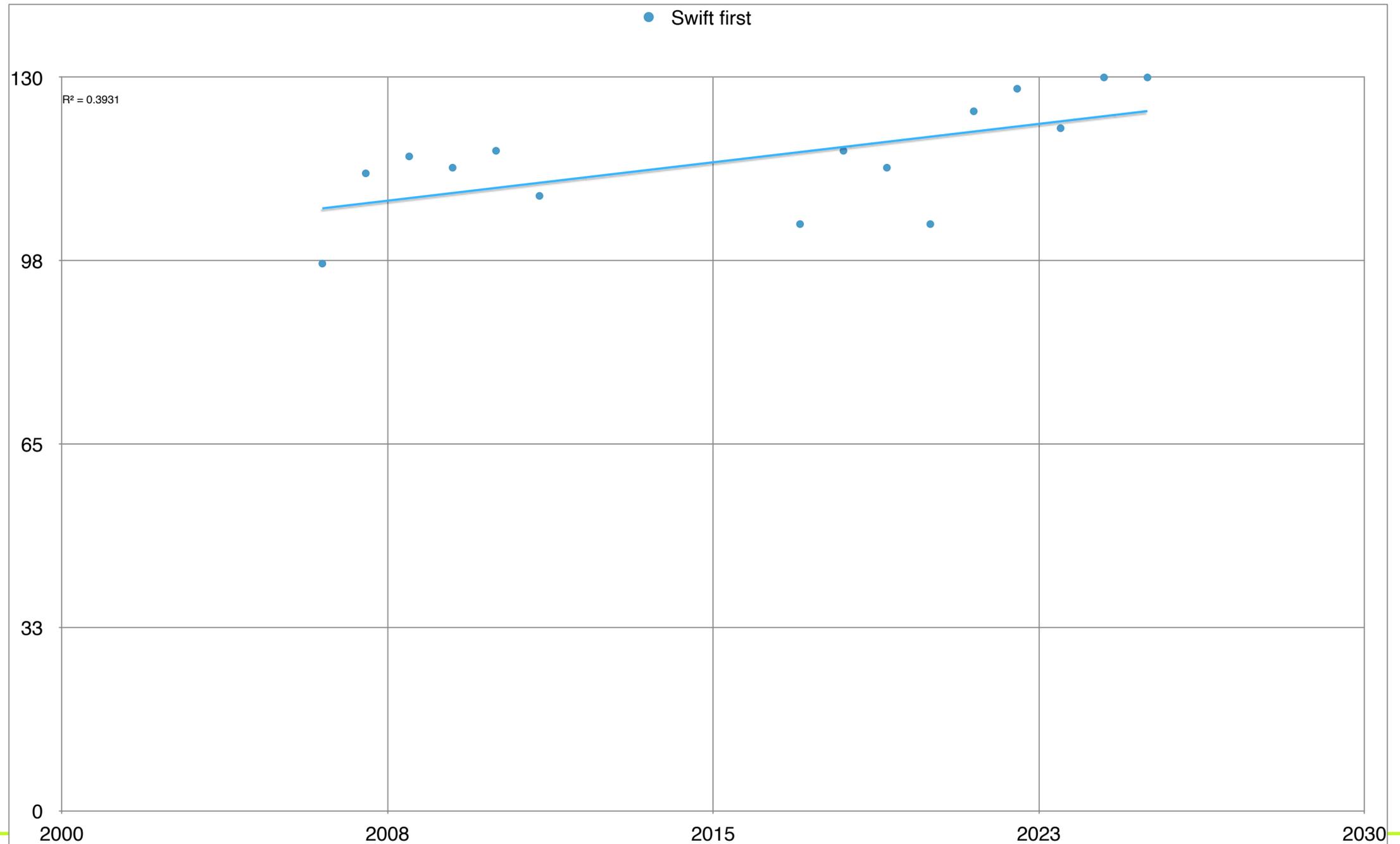
# Large Red Damselfly

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
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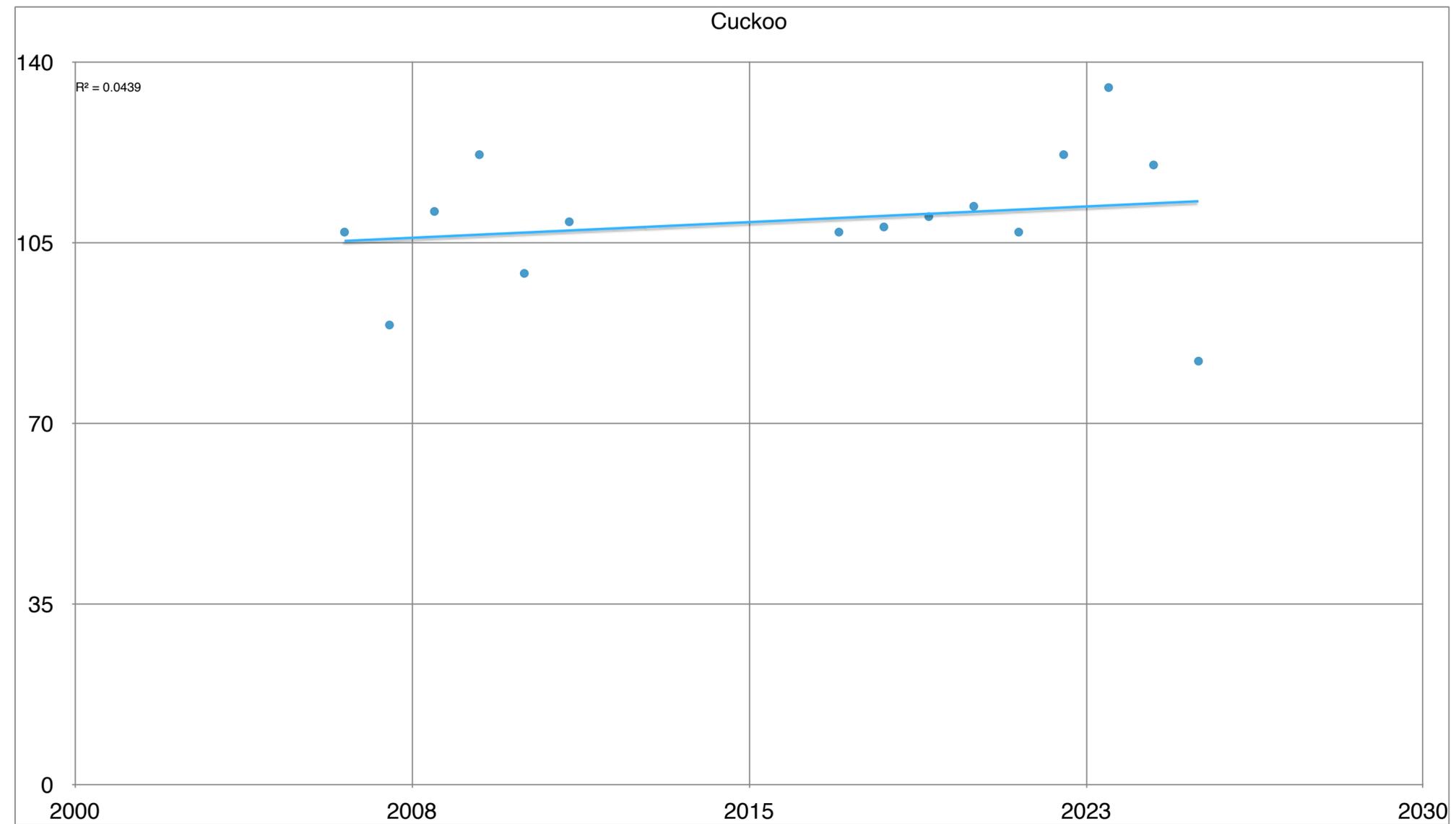
# Swift

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
<b>Apr 30th</b>	<b>121</b>
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<b>Feb 29th</b>	<b>60</b>
<b>Jan 31st</b>	<b>31</b>



# Cuckoo

<b>June 30th</b>	<b>182</b>
<b>May 31st</b>	<b>152</b>
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# Comments

- 2025 spring was hot !
- Therefore, as expected 5 of our indicators occurred earlier than last year.
- Over the long term, 7 of our 12 indicators are occurring earlier and 2 (Swift and Cuckoo) later.
- The sample size for some recordings is getting much smaller e.g. Frog Spawn and Cuckoo

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# Going forward

- The more records , the better the quality of the results. Please take a recording sheet in Jan.
- More personalised ...
- Please select one tree ... and record its flowering.

