

As of 18 April 2021, the forecast date of leafout is 5 May for mid-elevation bird plots at Hubbard Brook.

Phenology measurements by Amey Bailey, Northern Research Station, USDA Forest Service.

Leaf phenology model adapted from Nina Lany et al. 2016, *Oikos*.

Analyses by Matt Ayres et al., Dartmouth College.

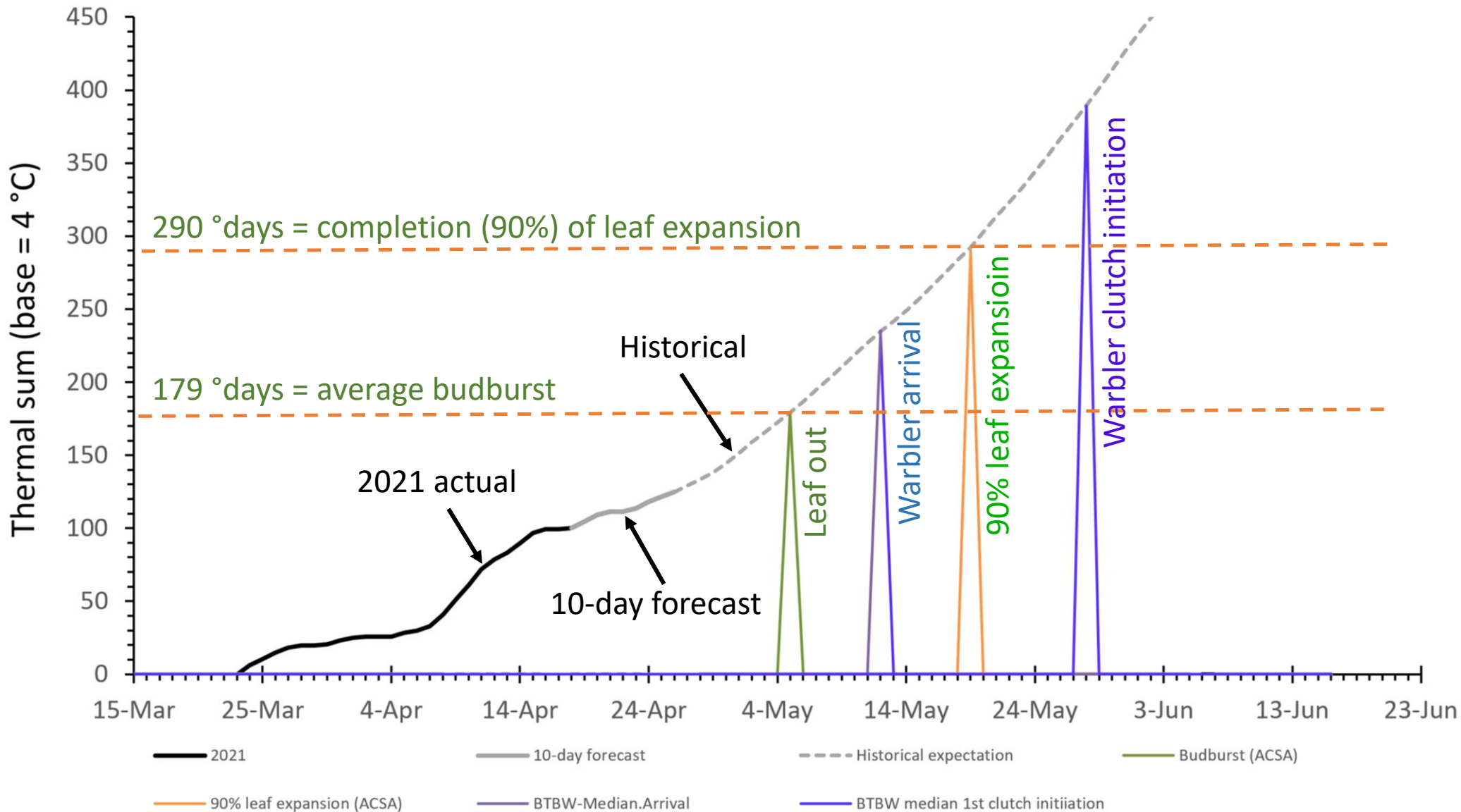
Estimated leaf-out phenology for mid-elevation Bird Plot in 2021 based on thermal sums.

As of 18 April 2021, predicted dates for budburst and 90% completion of leaf expansion are:

5 May and 19 May.

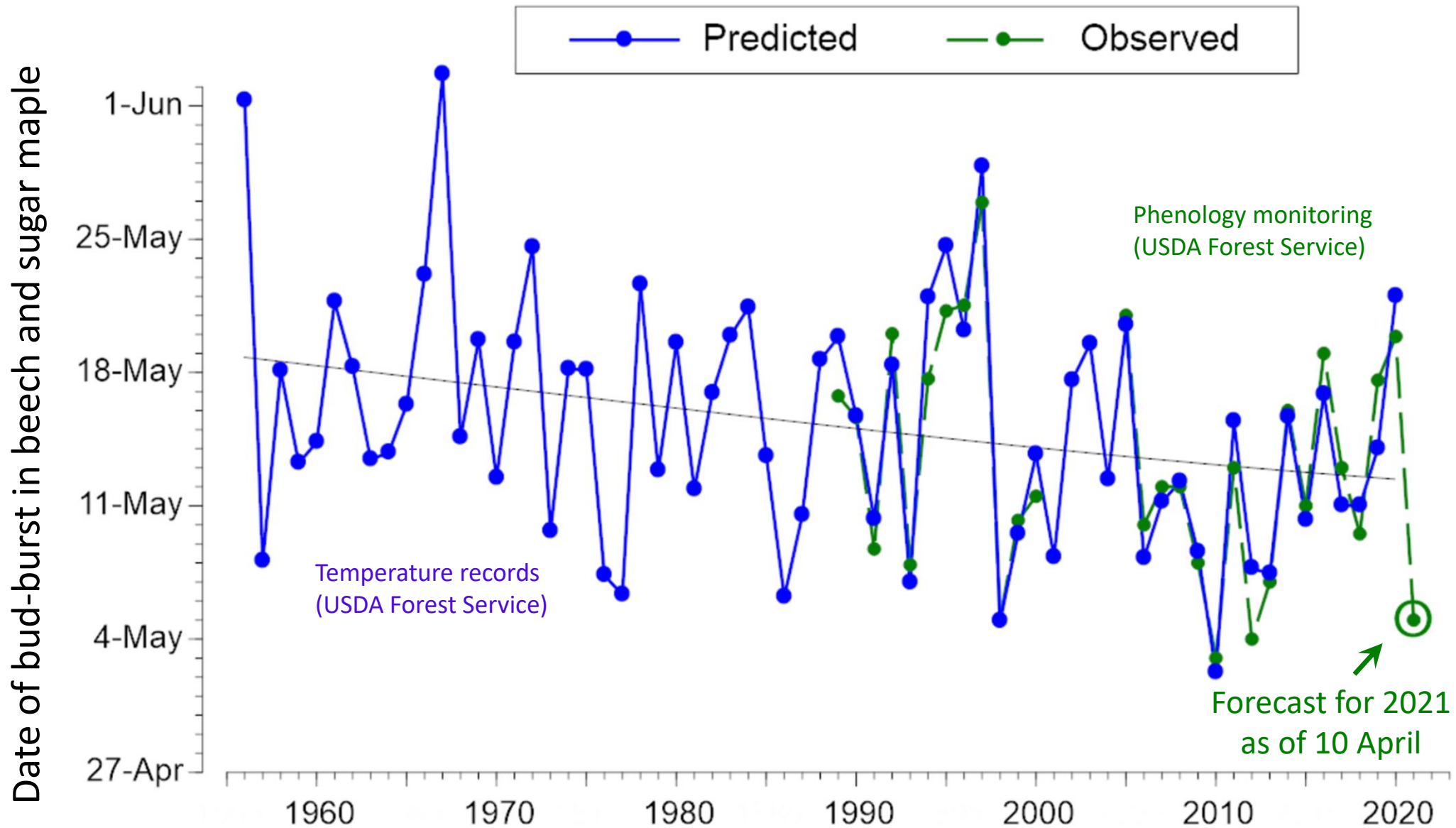
Predicted median dates of Arrival and 1st clutch initiation by Black-throated Blue Warblers are:

12 May and 28 May.



Real-time temperature records from USDA National Water & Climate Center (site 2069).

Phenological models adapted from Lany et al. 2016 using long term data of USDA Forest Service.



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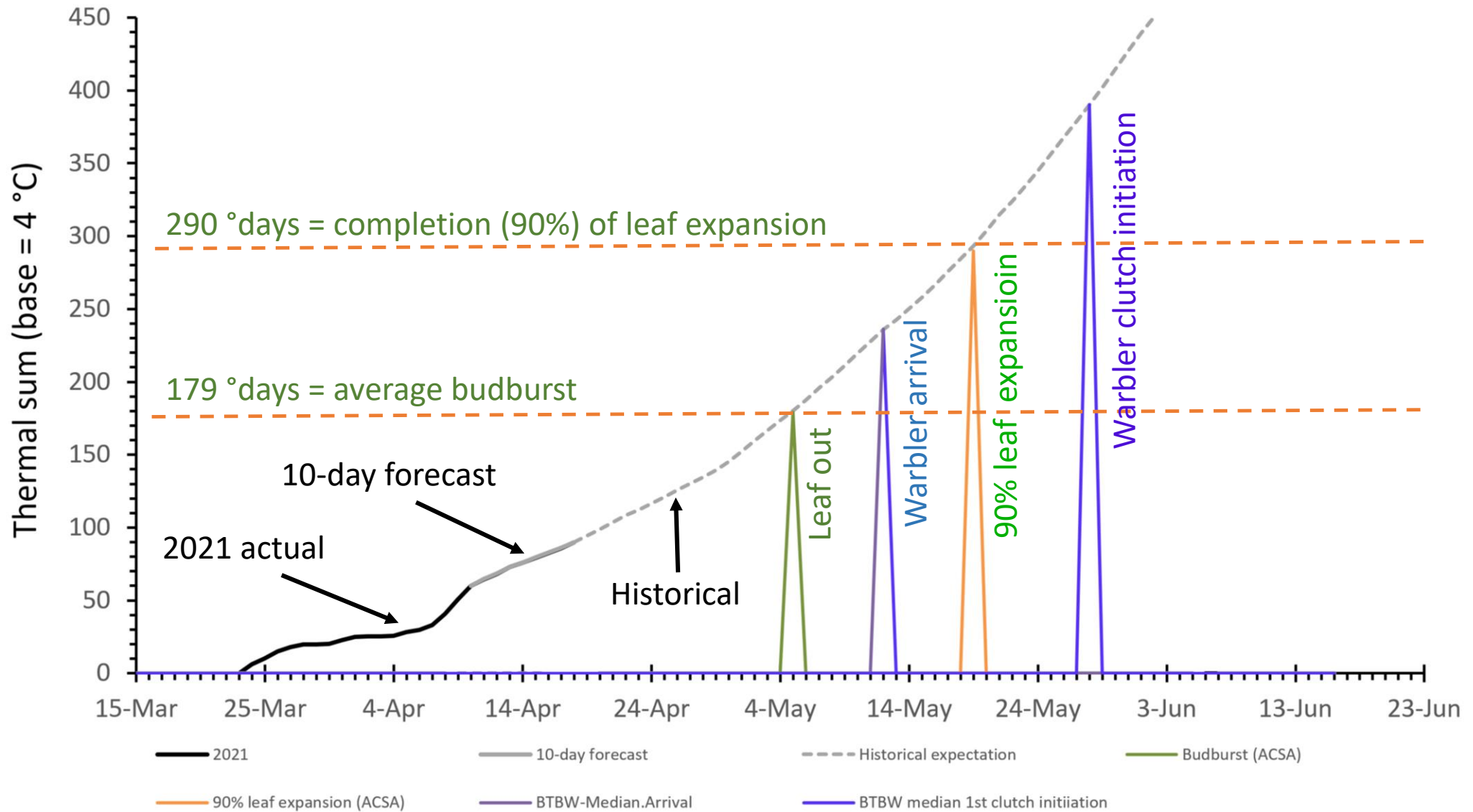
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References

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<https://doi.org/10.6073/pasta/f2c18a955c24eadaec1fa0d915a7b527>

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<https://doi.org/10.6073/pasta/e7c793b98b895de2bb5e505f9ff5e0c>

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