Supporting Figures and Tables

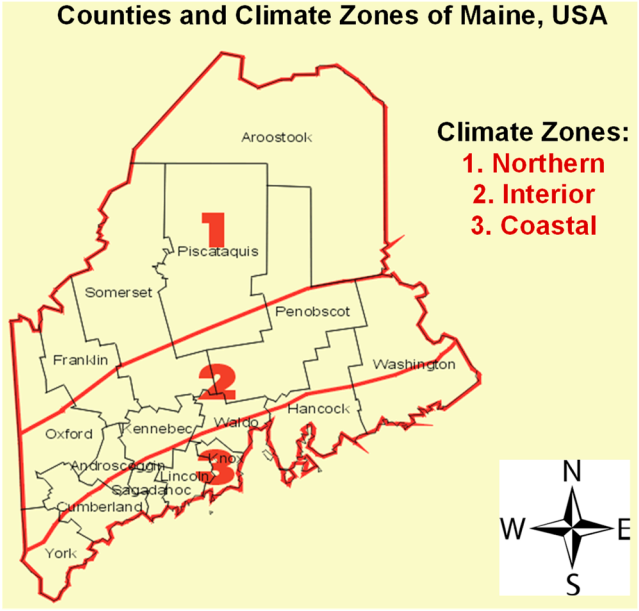

Figure S1. A map showing different counties and climate regions of Maine. (The map was acquired from NOAA National Weather Service, NOAA Center for Weather and Climate Prediction (website: https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/CLIM_DIVS/maine.gif; accessed on 22 March 2022).

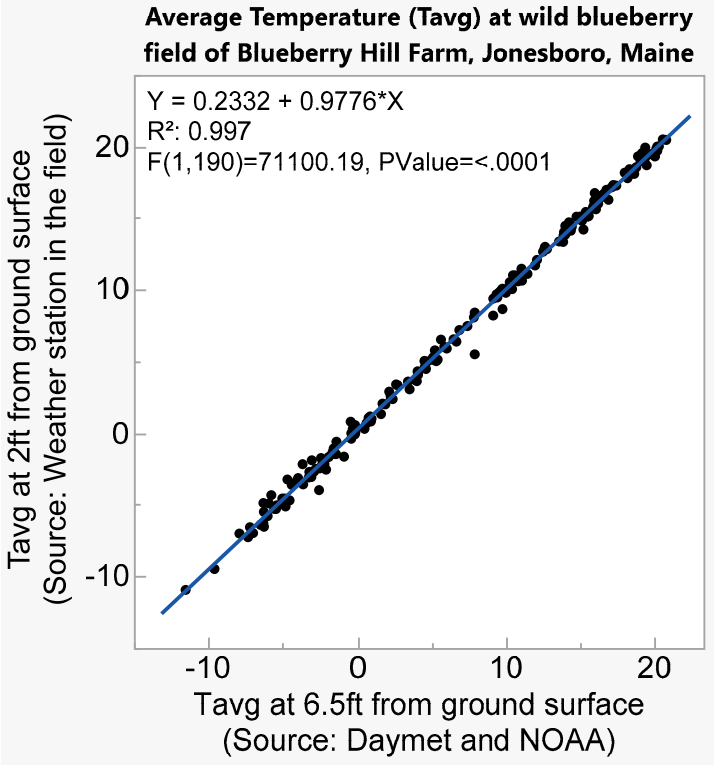

Figure S2. The relationship between average temperature recorded by different weather stations at 2 ft and 6.5 ft from the ground surface in a wild blueberry field at the Blueberry Hill Farm, Jonesboro, Maine. Here, each point represents monthly average temperature calculated from the recorded daily maximum and minimum temperature by the deployed weather stations. The solid line represents a linear relationship fitted to the data by linear regression analysis ($p < 0.0001$) and the shaded region represents a 95% confidence interval.

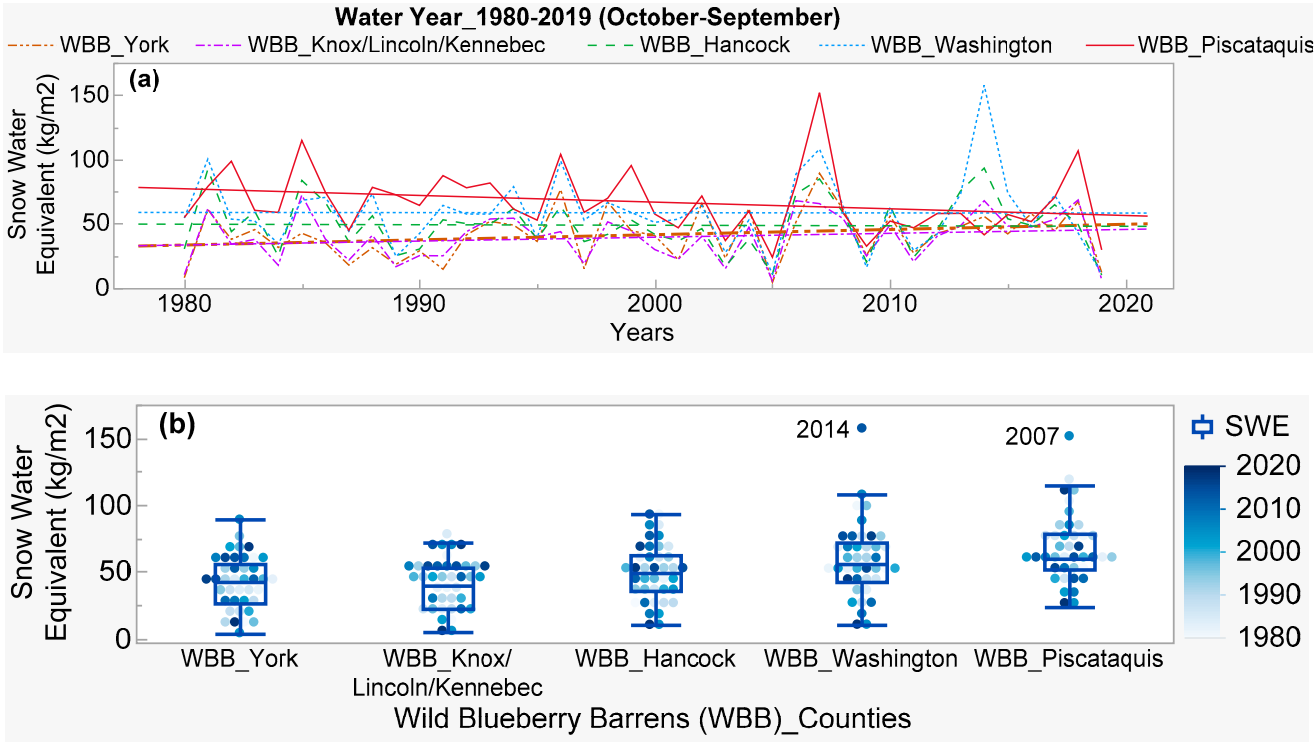

Figure S3. (a) Historical (water year: 1980 to 2019) changes with fitted linear regression trendlines for the snow water equivalent (SWE) throughout the studied wild blueberry barrens (WBB) and (b) Comparison of historical (water year: 1980 to 2019) snow water equivalent (SWE) among the studied wild blueberry barrens (WBB) at different counties from North-Central (Piscataquis) and North-East (Washington, Hancock) to South-West (Knox, Lincoln, Kennebec, York) of Maine as shown in Fig. 1 and S1. Here, 1980 water year indicates October 1980 to September 1981, and 2019 water year indicates October 2019 to September 2020.

Table S1. Historical trend analysis of Seasonal climate variables using Mann–Kendall test, and comparison of a linear regression fitted slopes using slope t-test among the studied wild blueberry barrens (WBB) at different counties from North-Central (Piscataquis) and North-East (Washington, Hancock) to South-West (Knox, Lincoln, Kennebec, York) of Maine (shown in Fig. 1) from 1980 to 2020. Bold parts indicate significant strength in historical climate trends. Different letters associated with the "Slope rate" and "°C/year" indicate significant differences among the counties at a significance level of $p < 0.05$.

Season	Climate variables	Mann-Kendall & Slope t-test	Wild Blueberry Barrens (WBB)_Counties				
			WBB_ Piscataquis	WBB_ Washington	WBB_ Hancock	WBB_Knox/ Lincoln/Kennebec	WBB_ York
Summer	T_{max} in Fig. 5a	Kendall's tau	**0.27**	**0.36**	0.14	0.12	0.05
		p-value	**0.01**	**0.0008**	0.21	0.24	0.64
		Trend	**Increasing**			Increasing	
		Slope rate, °C	1a	1.5b	0.6c	0.6c	0.2d
		°C/year	0.024a	0.036b	0.015c	0.015c	0.005d
	T_{min} in Fig. 5b	Kendall's tau	**0.4**	**0.47**	**0.44**	**0.38**	**0.5**
		p-value	**0.0002**	**<0.0001**	**<0.0001**	**0.0004**	**<0.0001**
		Trend	**Increasing**				

		Slope rate, °C	1.7ab	1.8a	1.7ab	1.4b	1.9ac
		°C/year	0.04ab	0.044a	0.04ab	0.034b	0.046ac
	T_{avg} in Fig. 5c	Kendall's tau	**0.39**	**0.48**	**0.35**	**0.24**	**0.31**
		p-value	**0.0003**	**<0.0001**	**0.0013**	**0.02**	**0.004**
		Trend	**Increasing**				
		Slope rate, °C	1.3ab	1.6b	1.1a	1a	1a
		°C/year	0.03ab	0.04b	0.027a	0.024a	0.024a
	P_{total} in Fig. 5d	Kendall's tau	0.02	0.0073	0.0073	0.06	0.07
		p-value	0.8	0.94	0.94	0.56	0.53
		Trend	No change				
Winter	T_{max} in Fig. 7a	Kendall's tau	0.21	0.21	0.16	0.15	0.04
		p-value	0.05	0.05	0.12	0.17	0.67
		Trend	Increasing				
		Slope rate, °C	1.3a	1ab	0.9b	0.8b	0.4c
		°C/year	0.03a	0.024ab	0.022b	0.02b	0.009c
	T_{min} in Fig. 7b	Kendall's tau	**0.26**	**0.24**	**0.28**	**0.23**	**0.28**
		p-value	**0.02**	**0.026**	**0.009**	**0.03**	**0.008**
		Trend	**Increasing**				
		Slope rate, °C	2.1a	2a	2a	1.9a	2a
		°C/year	0.051a	0.049a	0.049a	0.046a	0.049a
	T_{avg} in Fig. 7c	Kendall's tau	**0.25**	**0.23**	**0.22**	0.19	0.18
		p-value	**0.02**	**0.03**	**0.04**	0.07	0.08
		Trend	**Increasing**			Increasing	
		Slope rate, °C	1.7a	1.5ab	1.5ab	1.3b	1.3b
		°C/year	0.04a	0.036ab	0.036ab	0.032b	0.032b
	P_{total} in Fig. 7d	Kendall's tau	0.15	**0.22**	0.19	0.16	0.18
		p-value	0.15	**0.04**	0.08	0.14	0.09
		Trend	Increasing	**Increasing**		Increasing	
		Slope rate, mm	20-50 mm increasing rate (no significant changes among counties)				
		mm/year	0.5-1.2 mm increasing rate per year				
	Summer T_{max} - Winter T_{min} in Fig. 8	Kendall's tau	−0.17	−0.13	**−0.24**	**−0.21**	**−0.26**
		p-value	0.11	0.23	**0.02**	**0.048**	**0.02**
		Trend	Decreasing			**Decreasing**	
		Slope rate, °C	3a	1.5b	3a	2.9a	3.6c
		°C/year	0.073a	0.036b	0.073a	0.07a	0.088c

Fall	T_{max} in Fig. 10a	Kendall's tau	**0.31**	**0.35**	**0.28**	**0.26**	0.13
		p-value	**0.004**	**0.0014**	**0.01**	**0.01**	0.21
		Trend	**Increasing**				Increasing
		Slope rate, °C	2.2a	2.1a	1.5b	1.5b	0.9c
		°C/year	0.053a	0.051a	0.036b	0.036b	0.022c
	T_{min} in Fig. 10b	Kendall's tau	**0.42**	**0.41**	**0.44**	**0.48**	**0.56**
		p-value	**<0.0001**	**0.0001**	**<0.0001**	**<0.0001**	**<0.0001**
		Trend	**Increasing**				
		Slope rate, °C	2.5a	2b	2.5a	2.4a	2.9c
		°C/year	0.06a	0.049b	0.06a	0.058a	0.07c
	T_{avg} in Fig. 10c	Kendall's tau	**0.41**	**0.39**	**0.37**	**0.38**	**0.38**
		p-value	**0.0002**	**0.0003**	**0.0007**	**0.0004**	**0.0005**
		Trend	**Increasing**				
		Slope rate, °C	2.35a	2a	2a	2a	1.9a
		°C/year	0.057a	0.049a	0.049a	0.049a	0.046a
	P_{total} in Fig. 10d	Kendall's tau	0.14	0.13	0.11	0.18	0.19
		p-value	0.18	0.21	0.3	0.09	0.07
		Trend & Rate	Increasing 20-50 mm over 1980-2020				
		mm/year	0.5-1.2 mm increasing (no significant changes among counties)				
Spring	T_{max} in Fig. 12a	Kendall's tau	0.03	0.08	−0.04	−0.03	−0.11
		p-value	0.77	0.46	0.68	0.77	0.3
		Trend	No significant changes				
	T_{min} in Fig. 12b	Kendall's tau	0.05	0.07	0.06	0.002	0.05
		p-value	0.64	0.5	0.56	0.98	0.6
		Trend	No significant changes				
	T_{avg} in Fig. 12c	Kendall's tau	0.03	0.06	−0.02	−0.05	−0.05
		p-value	0.78	0.57	0.87	0.65	0.65
		Trend	No significant changes				
	P_{total} in Fig. 12d	Kendall's tau	−0.002	−0.024	-0.012	−0.12	0.02
		p-value	0.98	0.82	0.91	0.26	0.84
		Trend	No significant changes				