

(Appendix:  $^{14}\text{C}$  ages from varves in New England. Possible problems with individual ages are indicated below age listing in parentheses. Missing  $\delta^{13}\text{C}$  values are ages for which no value was recorded. All dates are AMS  $^{14}\text{C}$  ages unless specified as beta counting dates. Lab numbers with bold type were used for the NAVC calibration. (See <http://eos.tufts.edu/varves/NAVC/navccalib.asp> for the most current calibration of the NAVC.)

Laboratory Number	Age ( $^{14}\text{C}$ yr BP)	$\delta^{13}\text{C}$ PDB(‰)	NEVC/ <i>NAVC</i> yr	Material dated	Reference
<u>East Windsor Hills, South Windsor, Connecticut (outcrop - Kelsey Ferguson Plant, Redlands Brick Co.)</u>					
<b>OS-77140</b>	14,300 ± 60	-26.23	<b>3505/3513</b>	Terrestrial plant leaves, mostly <i>Dryas integrifolia</i> (split with below)	Unpublished
<b>OS-77141</b>	14,300 ± 70	-27.79	<b>3505/3513</b>	Terrestrial plant leaves, mostly <i>Dryas integrifolia</i> (split with above)	Unpublished
<b>OS-76979</b>	14,200 ± 70	-27.24	<b>3726/3739</b>	Terrestrial plant leaves, includes <i>Dryas integrifolia</i> , <i>Salix</i> , <i>Populus</i>	Unpublished
OS-77139	12,700 ± 50	-26.19	<b>3763/3776</b>	Terrestrial plant leaves, includes <i>Dryas integrifolia</i> , <i>Salix</i> , <i>Populus</i> (Younger than contemporaneous samples by ~1500 yr)	Unpublished
OS-76978	13,050 ± 60	-27.29	<b>3820/3833</b>	Terrestrial plant leaves, includes <i>Dryas integrifolia</i> , <i>Salix</i> , <i>Populus</i> (Younger than contemporaneous samples by ~1000 yr)	Unpublished
<b>GX-32114</b>	14,120 ± 80	-27.5	<b>3826/3839</b>	Terrestrial plant leaves, mostly <i>Salix</i> and <i>Dryas integrifolia</i> (20%)	Unpublished
OS-76905	14,450 ± 70	-27.57	<b>3896/3909</b>	Terrestrial plant leaves, includes <i>Dryas integrifolia</i> , <i>Salix</i> , <i>Populus</i>	Unpublished
<b>OS-76904</b>	13,550 ± 55	-25.65	<b>3922/3935</b>	Terrestrial plant leaves, includes <i>Dryas integrifolia</i> , <i>Salix</i> , <i>Populus</i>	Unpublished
<b>OS-76903</b>	14,000 ± 70	-27.44	<b>3969/3982</b>	Terrestrial plant leaves, 10% <i>Dryas Integrifolia</i> with <i>Salix</i> and <i>Populus</i>	Unpublished
OS-76902	11,950 ± 55	-27.22	<b>3989/4002</b>	Terrestrial plant leaves and stems, includes <i>Salix</i> and <i>Populus</i> (Younger than contemporaneous samples by ~1500 yr, low sample mass)	Unpublished
OS-77228	13,300 ± 130	-27.45	<b>3997/4010</b>	Terrestrial plant leaves and stems, includes <i>Salix</i> and <i>Populus</i>	Unpublished
<b>GX-32113</b>	13,950 ± 90	-28.5	<b>4113/4126</b>	Terrestrial plant leaves, mostly <i>Salix</i> and <i>Dryas integrifolia</i> (33%)	Unpublished
<u>Amherst, Massachusetts (UMass campus long core)</u>					
<b>Beta-124780</b>	12,370 ± 120	-27.1	<b>5761-5768/ 5776-5783</b>	Plant fragments from core	Rittenour, 1999

North Hatfield, Massachusetts (long core)

OS-77149 10,150 ± 50 -27.13 5627/5646 Plant fragments from core, includes *Dryas integrifolia*, *Salix* and mosses (Younger than contemporaneous samples by >2500 yr) Unpublished

**OS-77150** 12,800 ± 60 -25.26 5713/5728 Plant fragments from core, includes *Dryas integrifolia*, *Salix* and mosses Unpublished

Aldrich Brook, Westmoreland, New Hampshire (long core)

OS-64787 11,950 ± 110 -28.55 6069/6084 10 *Salix* and *Populus* leaves Unpublished

**OS-65821** 12,600 ± 65 -28.00 6069/6084 2 *Dryas* receptacles, 10 full *Dryas integrifolia* leaves and mixture of other leaves including *Populus*, *Salix*, and *Dryas* leaf fragments Unpublished

**OS-65780** 12,300 ± 75 -26.74 6226/6241 ~40 *Dryas integrifolia* leaves with additional *Dryas* fragments Unpublished

OS-66121 11,150 ± 130 -28.29 6226/6241 ~40 *Dryas integrifolia* leaves with additional *Dryas* fragments (other half of sample above) (Younger than contemporaneous samples by >1100 yr, small sample mass) Unpublished

Walpole, New Hampshire (outcrop)

**OS-64811** 12,350 ± 190 -26.85 5958/5973 *Dryas integrifolia* leaves with two *Salix* and one *Populus* leaf Unpublished

Canoe Brook, Dummerston, Vermont (outcrop)

**GX-25735** 12,660 ± 50 -28.9 5858/5873 Woody twigs and *Dryas* leaves Ridge and others, 2001

**GX-32115** 12,340 ± 80 -29.0 6072/6087 Terrestrial plant leaves, mostly *Salix* and *Dryas integrifolia* (10%) Unpublished

**GX-14231** 12,355 ± 75 -27.2 6150/6165 Bulk sample of silt and clay with non-aquatic leaves and twigs (beta count) Ridge and Larsen, 1990

GX-14780 12,455 ± 360 -27.6 6150/6165 Handpicked non-aquatic leaves and twigs, mostly *Dryas* and *Salix* (beta count) Ridge and Larsen, 1990

**CAMS-2667** 12,350 ± 90 --- 6150/6165 *Salix* twig N. Miller, per. com. 1993

GX-14781 12,915 ± 175 -27.1 6156/6171 Bulk sample of silt and clay with fragments of peat and gyttja, likely contains aquatic plant material (beta count) Ridge and Larsen, 1990

Newbury, Vermont (outcrop)

OS-64816	10700 ± 430	-25.35	7115/ <b>6797</b>	Single <i>Dryas integrifolia</i> leaf (Younger than contemporaneous samples by >1500 yr, precision uncertainty high, small sample size)	Unpublished
OS-64812	11,550 ± 200	-27.75	7340/ <b>7022</b>	<i>Populus balsamifera</i> leaf	Unpublished
OS-65777	11,450 ± 85	-26.80	7378/ <b>7060</b>	<i>Dryas drummondii</i> leaf and many <i>Dryas integrifolia</i> leaves	Unpublished
<b>OS-64466</b>	11,950 ± 70	-19.39	7379/ <b>7061</b>	<i>Populus balsamifera</i> leaf	Unpublished
OS-64461	13,250 ± 75	-24.45	7423/ <b>7105</b>	<i>Populus balsamifera</i> leaf Re-dated as OS-65420) (Older than contemporaneous samples from same section by ~1300 yr)	Unpublished
OS-65420	13,250 ± 65	-25.84	7423/ <b>7105</b>	<i>Populus balsamifera</i> leaf (OS-64461 re-dated) (Older than contemporaneous samples from same section by ~1300 yr)	Unpublished
<b>GX-23765</b>	11,530 ± 95	-27.0	7435-7452/ <b>7117-7134</b>	Woody twig	Ridge and others, 1999
<b>OS-64086</b>	11,650 ± 50	-26.32	7441/ <b>7123</b>	Woody stem	Unpublished
<b>OS-65783</b>	11,700 ± 55	-28.22	7442/ <b>7124</b>	<i>Vaccinium</i> leaf and <i>Dryas integrifolia</i> leaves	Unpublished
<b>OS-64463</b>	11,900 ± 70	-26.84	7461-7462/ <b>7143-7144</b>	<i>Populus balsamifera</i> leaf	Unpublished
OS-64818	13,250 ± 1300	-25.00	7516/ <b>7198</b>	Single <i>Salix</i> leaf (Older than contemporaneous samples by >1200 yr, large precision uncertainty, small sample size)	Unpublished
<b>GX-23766</b>	11,045 ± 70	-27.5	8206/ <b>7888</b>	Woody twig	Ridge and others, 1999
<b>OS-77142</b>	11,100 ± 50	-26.38	8310/ <b>7992</b>	Chunk of wood	Unpublished
<b>GX-23640</b>	10,940 ± 70	-26.8	8357/ <b>8039</b>	Woody twig	Ridge and others, 1999
GX-23641	10,080 ± 580	-26.7	8498-8500/ <b>8180-8182</b>	Woody twig (beta count) (Precision uncertainty high, younger than contemporaneous samples by ~700 yr)	Ridge and others, 1999
<b>GX-23767</b>	10,685 ± 70	-26.3	8504/ <b>8186</b>	Woody twig	Ridge and others, 1999
GX-23642	10,040 ± 230	-26.5	8542-8544/ <b>8224-8226</b>	Chunk of wood (beta count) (Younger than contemporaneous samples by ~700 yr)	Ridge and others, 1999
GX-23643	10,440 ± 520	-26.8	8652-8662/ <b>8334-8344</b>	Two woody twigs (beta count) (Large precision uncertainty)	Ridge and others, 1999

Wells River, Vermont (outcrop)

<b>OS-66132</b>	12,100 ± 200	-26.05	7391/ <b>7073</b>	<i>Dryas drummondii</i> leaf	Unpublished
<b>OS-64475</b>	11,950 ± 65	-27.22	7396/ <b>7078</b>	Woody twig	Unpublished
<b>OS-65809</b>	11,950 ± 50	-27.77	7396/ <b>7078</b>	Thin woody twig	Unpublished
<b>OS-65810</b>	11,800 ± 50	-27.25	7396/ <b>7078</b>	Thin twigs and twig fragments	Unpublished
<b>OS-64474</b>	11,850 ± 70	-26.78	7414/ <b>7096</b>	Two woody twigs	Unpublished
<b>OS-65620</b>	11,900 ± 45	-3.61	7494/ <b>7176</b>	Snail, genus <i>Fossaria</i> in family <i>Lymnaeidae</i> (Note: this age may have a reservoir error but is essentially the same as ages for twig samples that may have a lag time error.)	Unpublished

East Barnet, Passumpsic River valley, Vermont (outcrop - site PAS2)

OS-64814	9,540 ± 250	-27.51	7330/ <b>7012</b>	Two leaves: <i>Dryas integrifolia</i> and <i>Dryas drummondii</i> (Small sample size, younger than contemporaneous samples by ~2500 yr)	Unpublished
OS-64817	10,950 ± 620	-25.00	7528/ <b>7210</b>	<i>Salix</i> leaf (Precision uncertainty high, small sample size, younger than contemporaneous samples by >700 yr)	Unpublished
OS-64815	11,600 ± 400	-28.64	7585/ <b>7267</b>	<i>Salix</i> leaf fragments	Unpublished
<b>GX-26456</b>	11,220 ± 50	-27.1	7754/ <b>7436</b>	Woody twig	Unpublished

Columbia Bridge, Vermont (outcrop)

WIS-961	11,540 ± 110	-29.0	(>7400)/(> <b>7082</b> )	Wood fragments (beta count) (Sample not matched to varve chronologies)	Miller and Thompson, 1979
WIS-919	11,390 ± 115	-27.5	(>7400)/(> <b>7082</b> )	Wood fragments (beta count) (Sample not matched to varve chronologies)	Miller and Thompson, 1979
WIS-925	20,500 ± 250	-	(>7400)/(> <b>7082</b> )	bulk sediment w <i>Potamogeton</i> leaves (beta count) (Sample not matched to varve chronologies, <i>Potamogeton</i> is aquatic and acquires carbon from non-atmospheric sources)	Miller and Thompson, 1979

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