

Table 3. Comparison of chironomid inferred temperatures (T_{VII} = July air temperature) and assemblage changes from Lake Brazi (Retezat Mts., South Carpathians) with other proxies from the Carpathians.

Age (cal yr BP)	Lake Brazi (South Carpathians)	Southern Carpathians	Eastern Carpathians	Western Carpathians
ca 11,500–10,200	inferred T_{VII} increase by 3.8°C; <i>T. lugens</i> - and <i>M. insignilobus</i> -type are replaced by Chironomini taxa and <i>T. pallidicornis</i> -type 2	rising temperatures (1; 2)	rising temperatures (3)	rising temperatures (4)
ca 10,200–8500	higher than present T_{VII} by 1.5-2.5°C; <i>T. mendax</i> -type dominates	shallow lake conditions with high summer temperatures (1; 5; 6)	warm climate and shallow lake condition (3; 7)	rising temperatures (4)
ca 8500–6500	inferred T_{VII} decreases by 1.0-1.2°C; <i>T. mendax</i> -type dominates and <i>P. sordidellus</i> -type increases	distinct lake level rise with still high summer temperatures (5; 6)	relatively warm summer temperatures (3)	
ca 6500–3000	inferred T_{VII} decreases further until present-day value (~11.2°C); <i>P. sordidellus</i> -type dominates and <i>T. mendax</i> -type decreases	increasing water levels associated with increasing precipitation and temperature decline (1; 5; 8)	cooling climate with increasing lake levels (7)	lower annual temperatures (9)
ca 3000–2000	inferred T_{VII} is under present-day value by 1.8-1.9°C; <i>T. lugens</i> -type dominate, while <i>T. mendax</i> - and <i>P. sordidellus</i> -type decrease	the highest lake levels (5)	cool climate with maximum precipitation (7; 10)	
ca 2000–	inferred T_{VII} increase until present-day value; <i>T. lugens</i> -, <i>T. mendax</i> -, <i>P. sordidellus</i> -type and <i>Zavreliomyia</i> type A dominate	cooler summers with increased precipitation (2) in the last 1500 years increased human impact in the Romanian Carpathians (3; 7)		

1 = Constantin et al., 2007; 2 = Magyari et al., 2012; 3 = Feurdean et al., 2008; 4 = Tămaş et al., 2005; 5 = Buczkó et al., 2013; 6 = Pál et al., *in press*; 7 = Magyari et al., 2009b; 8 = Magyari et al., 2009a; 9 = Onac et al., 2002; 10 = Schnitchen et al., 2006