Fig. 4. Summaries of physiological metrics from simulations at sites in Ohio (OH), Colorado (CO), Kansas (KS), Georgia (GA) and Texas (TX). All results are for 5 year simulations as depicted in Figs 1–3, and all represent the years 1973–1978, except for Ohio, which represents the years 2004–2009 (1973–1978 was not available for this site). In each plot, results are shown for simulations driven by daily data (pale-grey bars) and monthly averages (dark-grey bars) over the 5 year blocks. Results are presented for the three behavioural buffering scenarios – high (100% maximum shade, 2 m maximum burrow depth), low (50% maximum shade, 10 cm burrow depth) and none (sessile, on the surface in 0% shade).
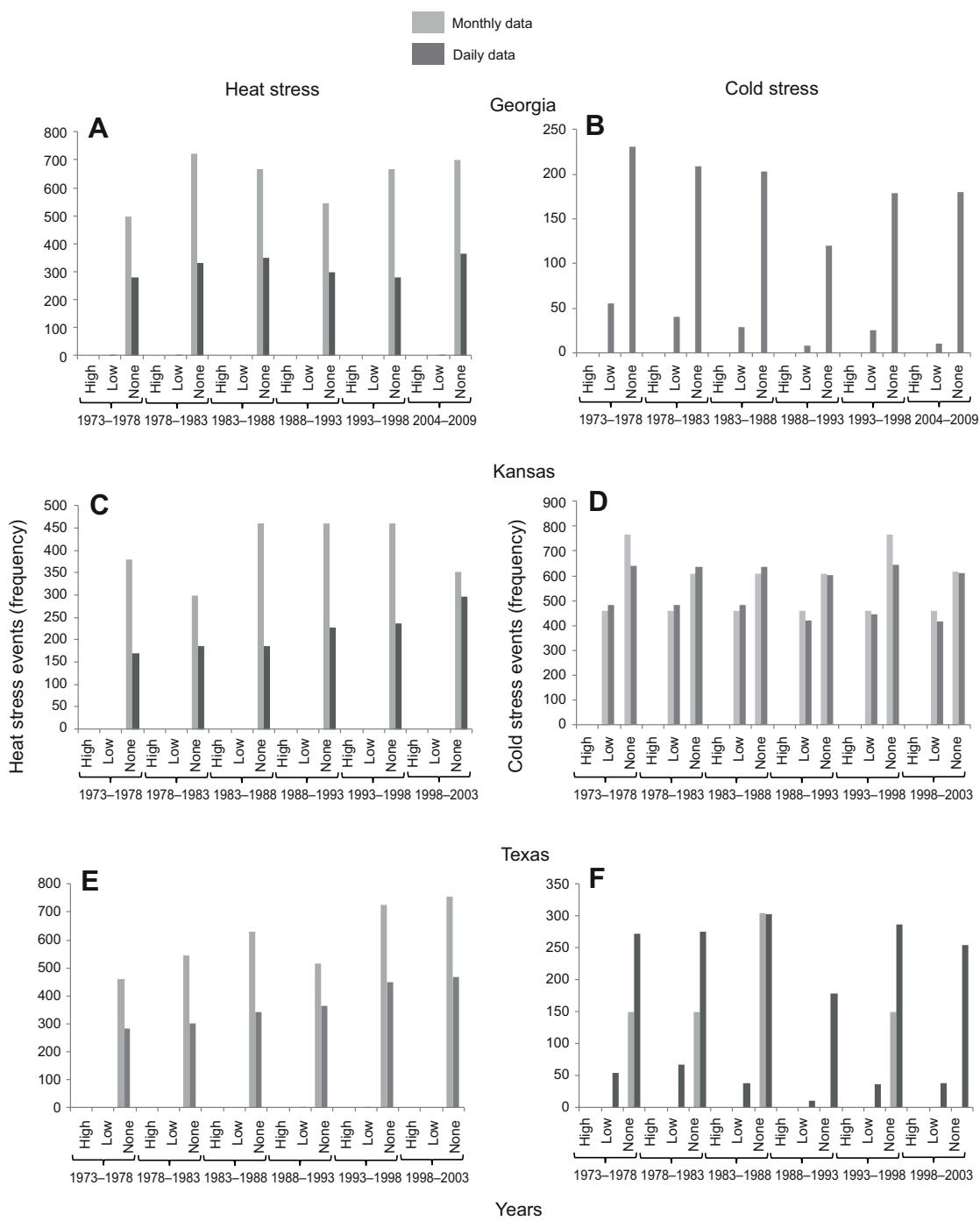
Fig. 5. Summaries of physiological metrics (heat and cold stress events) from simulations at three sites where climate data for 30 years were available. All results are for 5 year simulations, as depicted in Figs 1–3. In each plot, results are shown for simulations driven by daily data (pale-grey bars) and monthly averages (dark-grey bars) over different 5 year blocks. Results are presented for the three behavioural buffering scenarios – high (100% maximum shade, 2 m maximum burrow depth), low (50% maximum shade, 10 cm burrow depth) and none (sessile, on the surface in 0% shade).
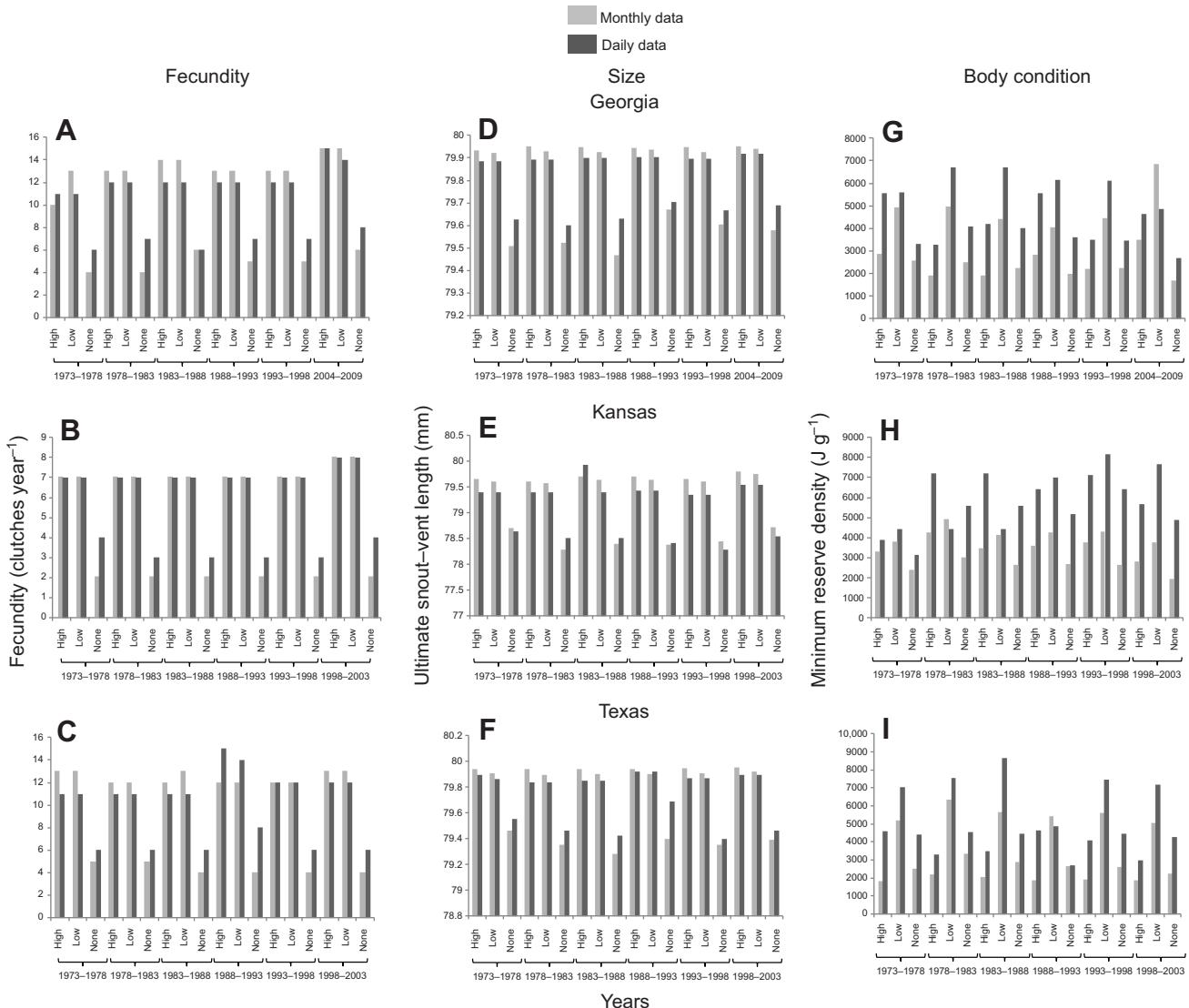
Fig. 6. Summaries of physiological metrics (fecundity, maximum body size and minimum reserve density) from simulations at three sites where climate data for 30 years were available. All results are for 5 year simulations, as depicted in Figs 1–3. In each plot, results are shown for simulations driven by daily data (pale-grey bars) and monthly averages (dark-gray bars) over different 5 year blocks. Results are presented for the three behavioural buffering scenarios – high (100% maximum shade, 2 m maximum burrow depth), low (50% maximum shade, 10 cm burrow depth) and none (~sessile, on the surface in 0% shade).