Solar cycle 24 looks set to be the weakest of the space age, both in terms of sunspot number and the heliospheric magnetic field (HMF). The most recent observations of the solar polar field polarities suggest the Sun is presently very close to solar maximum, despite the HMF only just reaching the level of previous solar minima. In order to put these observations in long-term context, I'll summarise the available proxies for the HMF and what they tell us about the Sun in the past. Then, probably imprudently, I'll speculate about what this means for future solar variations.