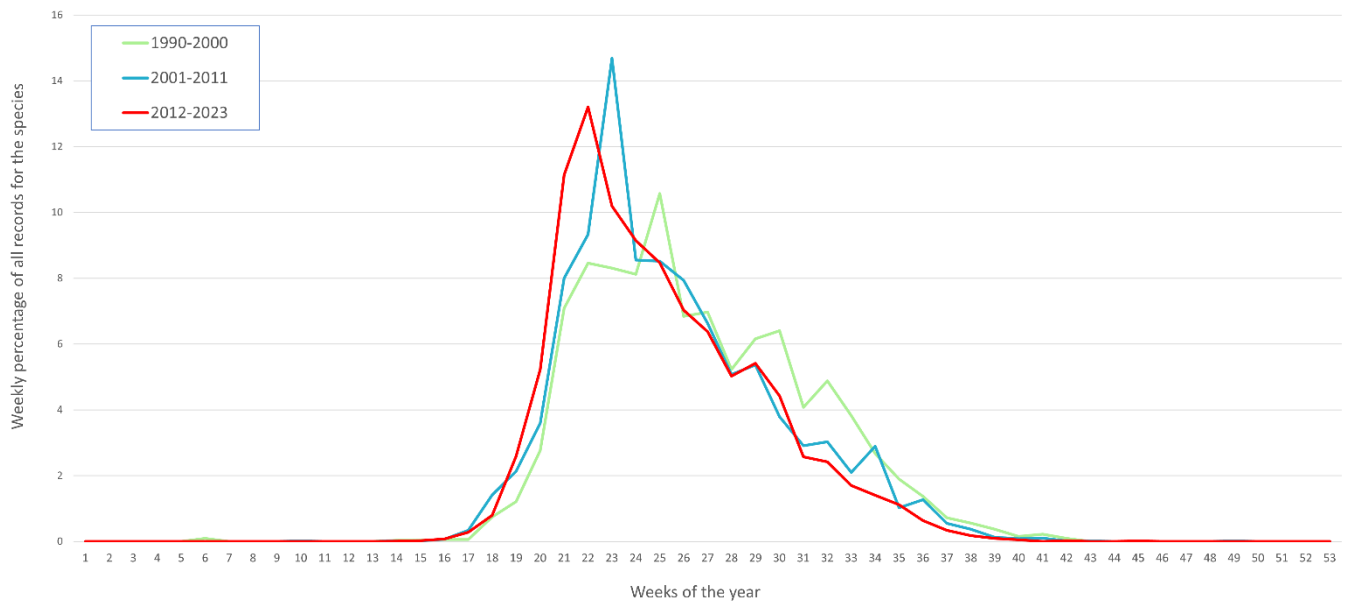


The charts in this document show flight period changes for a selection of dragonfly and damselfly species over the last thirty-odd years, in windows of eleven or twelve years. The lines in the graphs represent, for each species, the percentage of records (not individuals) for each week, as a proportion of the number of records over the whole year. The highest point in each line is largely irrelevant and the area under each line is approximately the same in each case, adding up to 100% of the yearly total averaged across the eleven or twelve year window. However, the shift in the shape is interesting. Generally for spring/early summer species (eg Four-spotted Chaser), the bulk of records occurs earlier now than at the end of last century, while for some later-flying species such as Common Darter, the shift in the south has been to the right, later in the year. The changes are sometimes less dramatic when measured in northern Britain – approximately north of a line from Seascale to Ravenscar; not always though (Blue-tailed Damselfly for example). Charts are included for all species examined (thirty species having substantial numbers of records), even where there is no significant change – notably, the hawkers except perhaps Brown Hawker. For some species, only southern Britain is relevant.

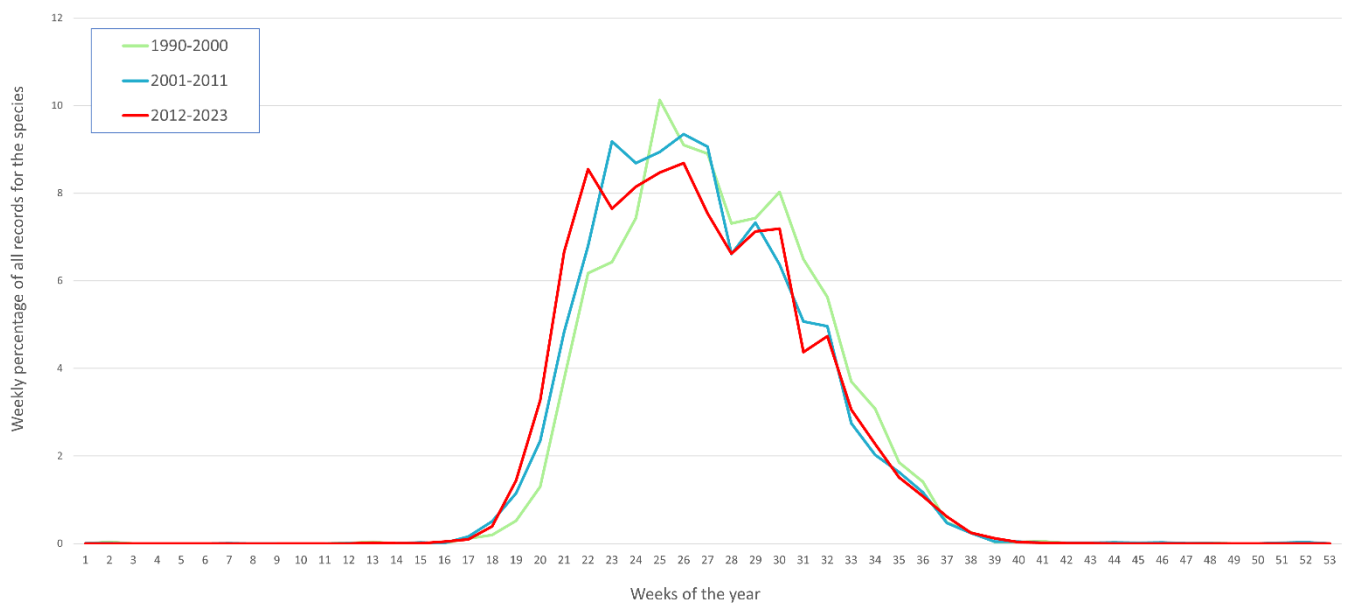
The start of the flight period for each species hasn't changed much, if at all, apparently. I suspect that is because day length is the most significant factor driving emergence. As to the end of the season, one particular chart - Scarce Blue tailed Damselfly – indicates support for the idea that the species now has two generations each year, as it does in southern Europe. All these charts are simply telling a story, there is no attempt to offer any explanation; care should be taken not to misinterpret them - for example, it might appear that Common Blue Damselfly numbers were higher during weeks 31-37 in the 1990-2000 window. That is not necessarily the case. If required, re-reading the above spiel might clarify that – records, not individuals. Percentages, percentages.

All data downloaded (November 2023-March 2024) from the National Biodiversity Network Atlas, supplied and verified by the British Dragonfly Society.

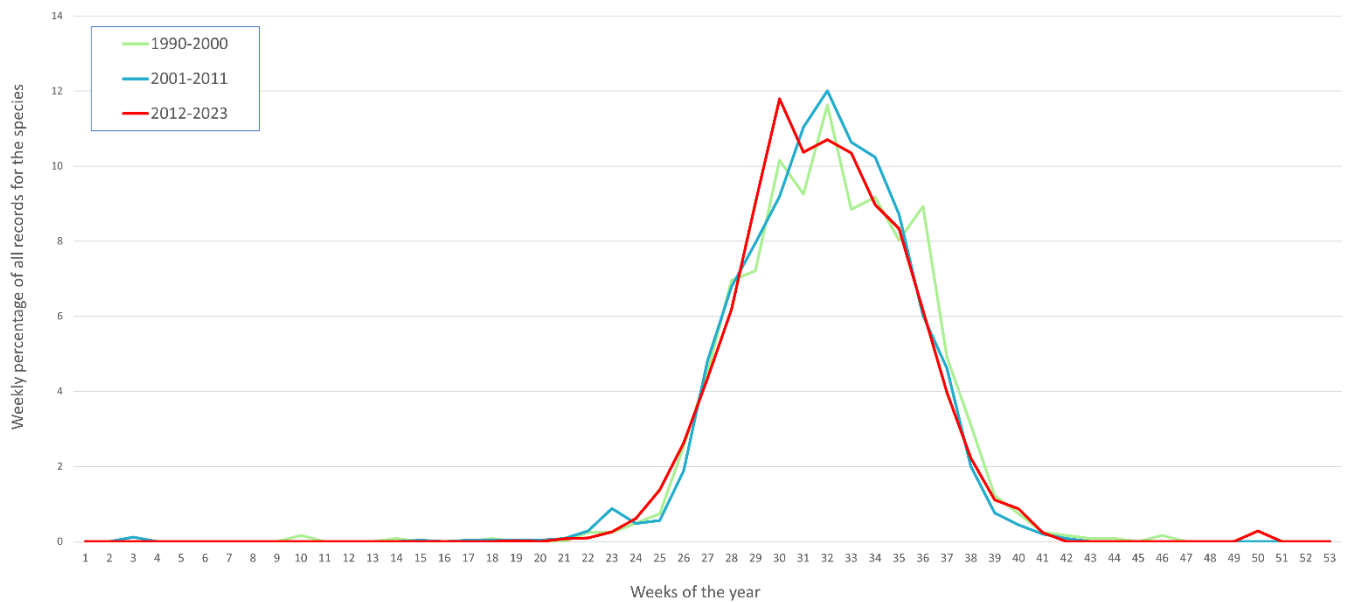
Beautiful Demoiselle - south Britain only



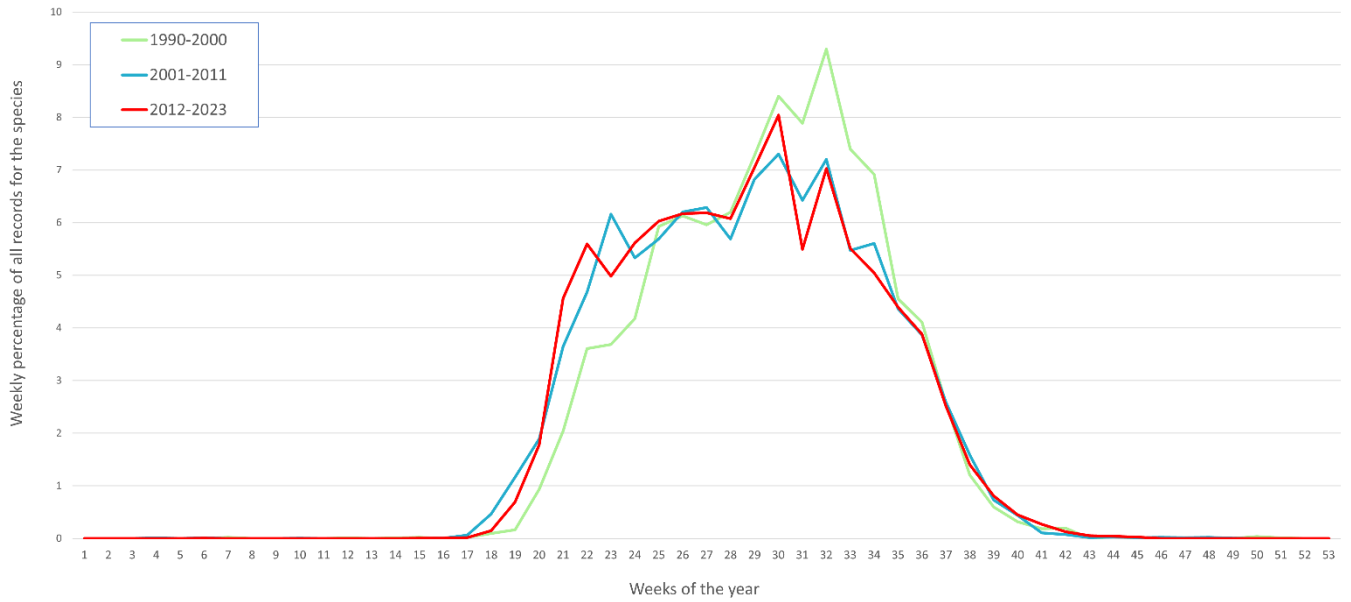
Banded Demoiselle - south Britain only



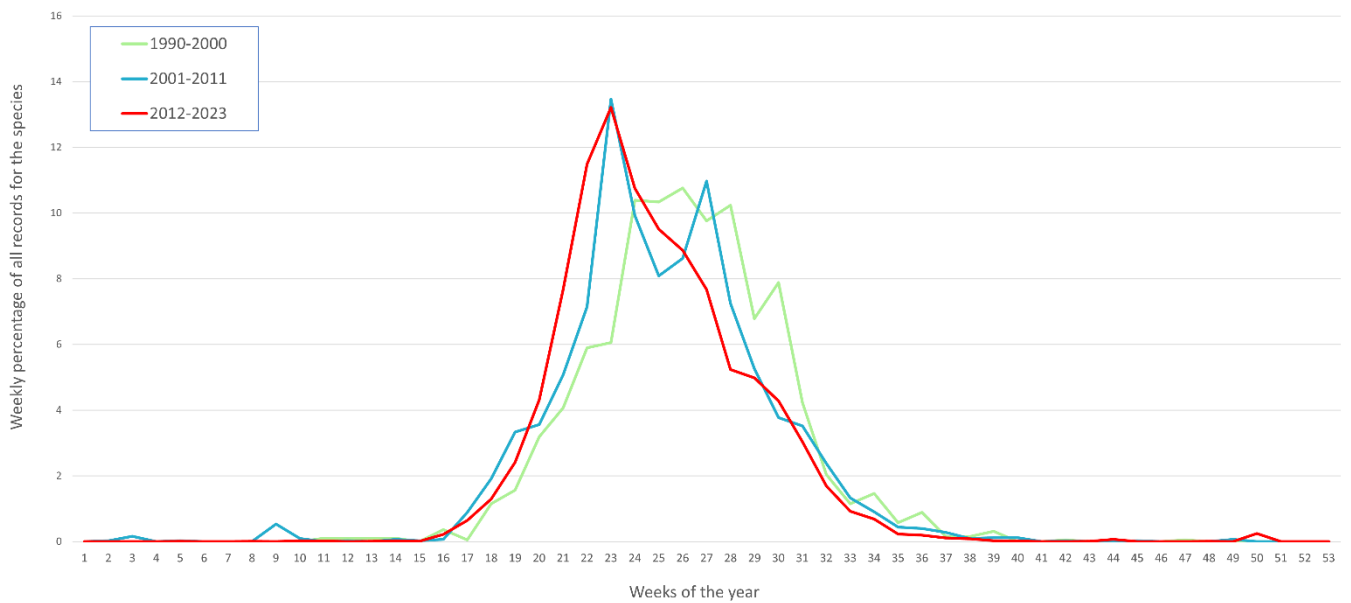
Emerald Damselfly - north Britain only



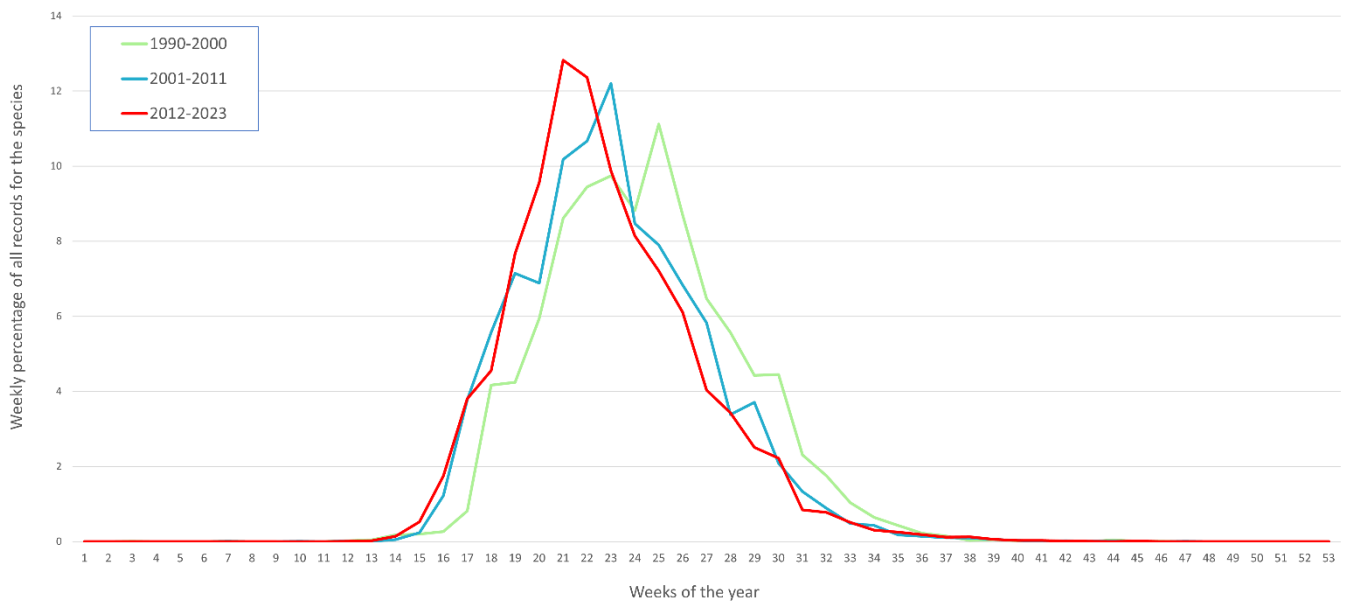
Emerald Damselfly - south Britain only



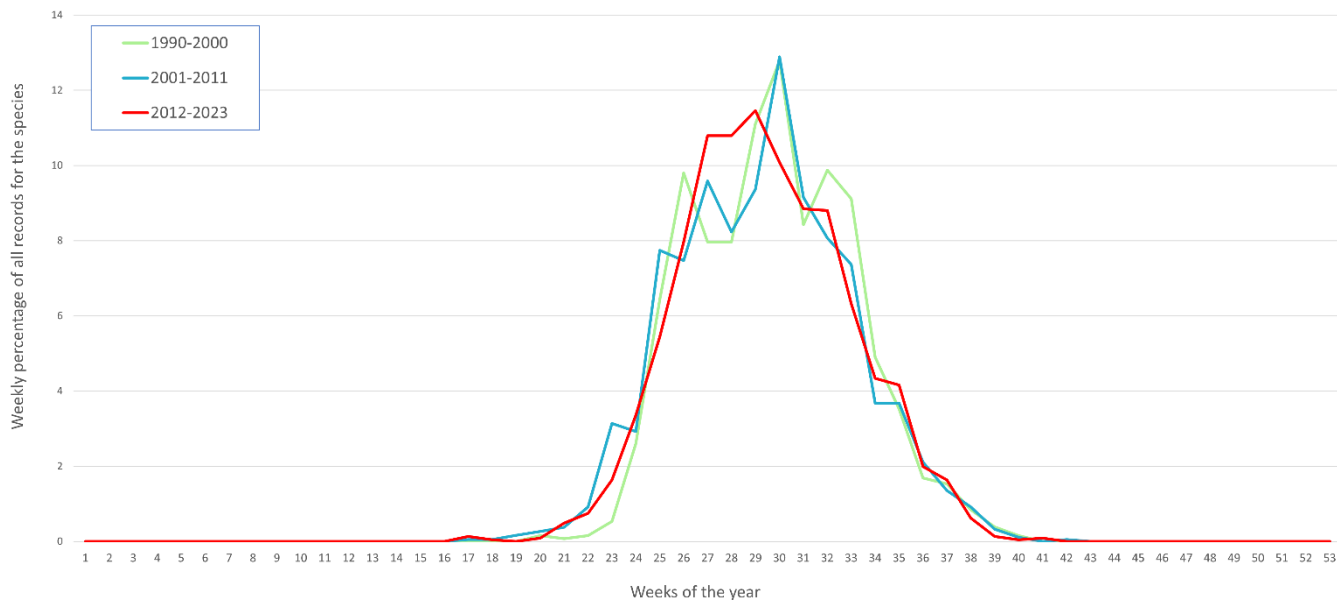
Large Red Damselfly - north Britain only



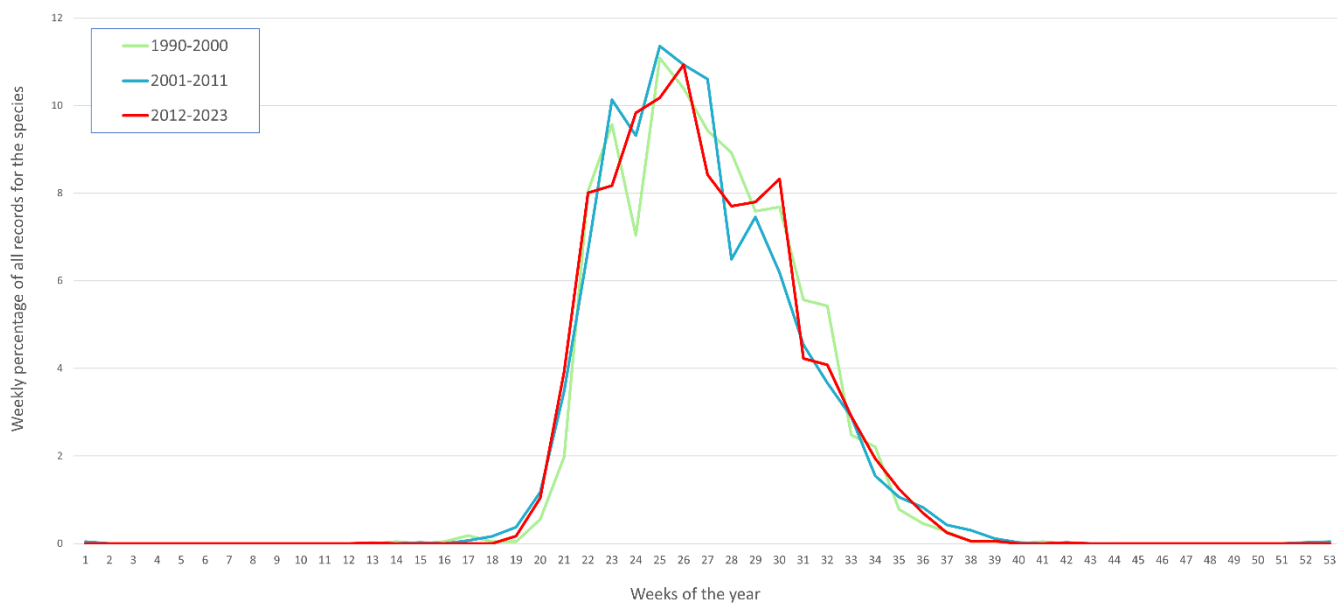
Large Red Damselfly - south Britain only



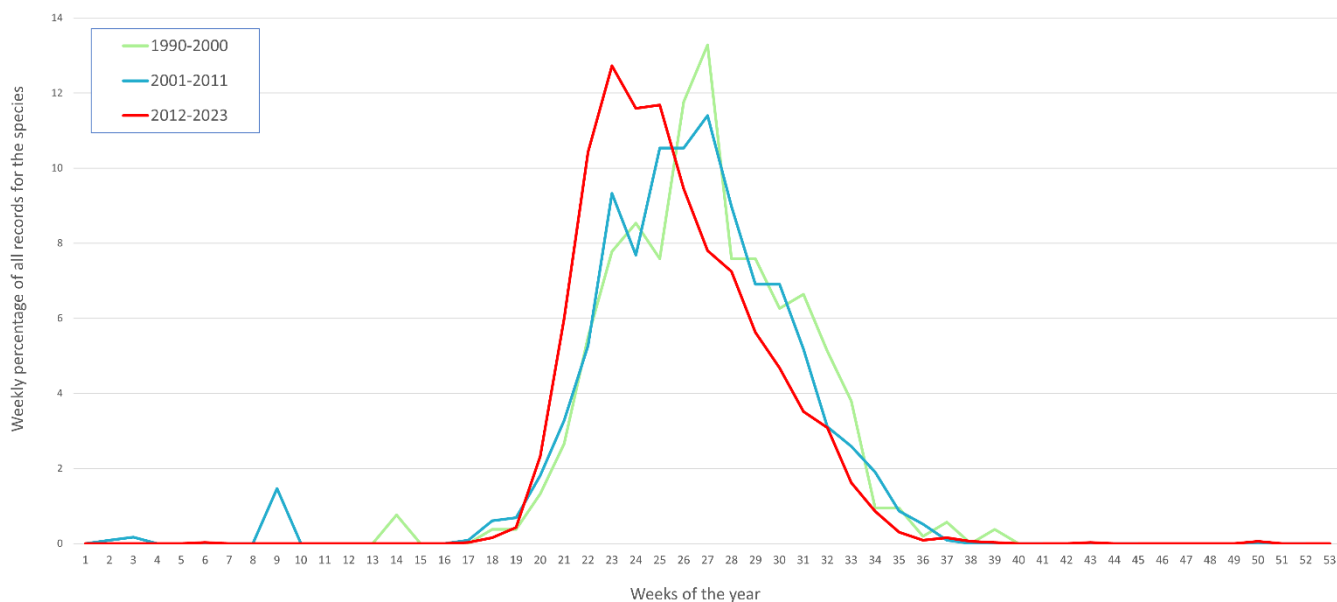
Small Red Damselfly - south Britain only



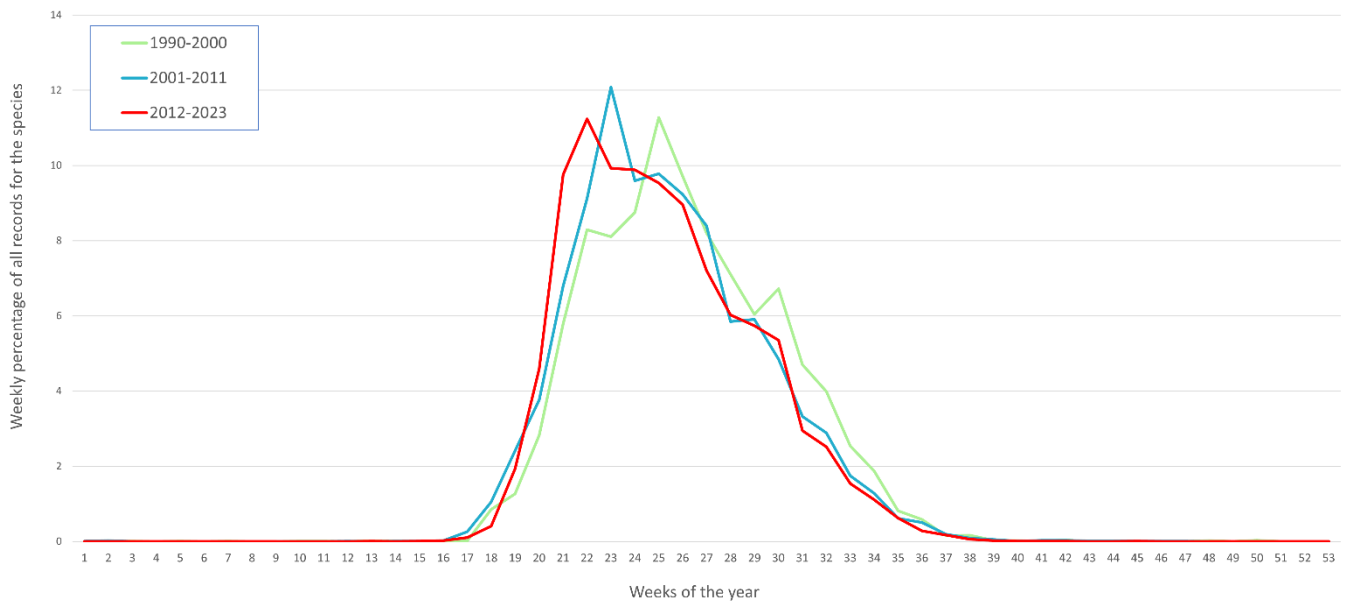
White-legged Damselfly - south Britain only



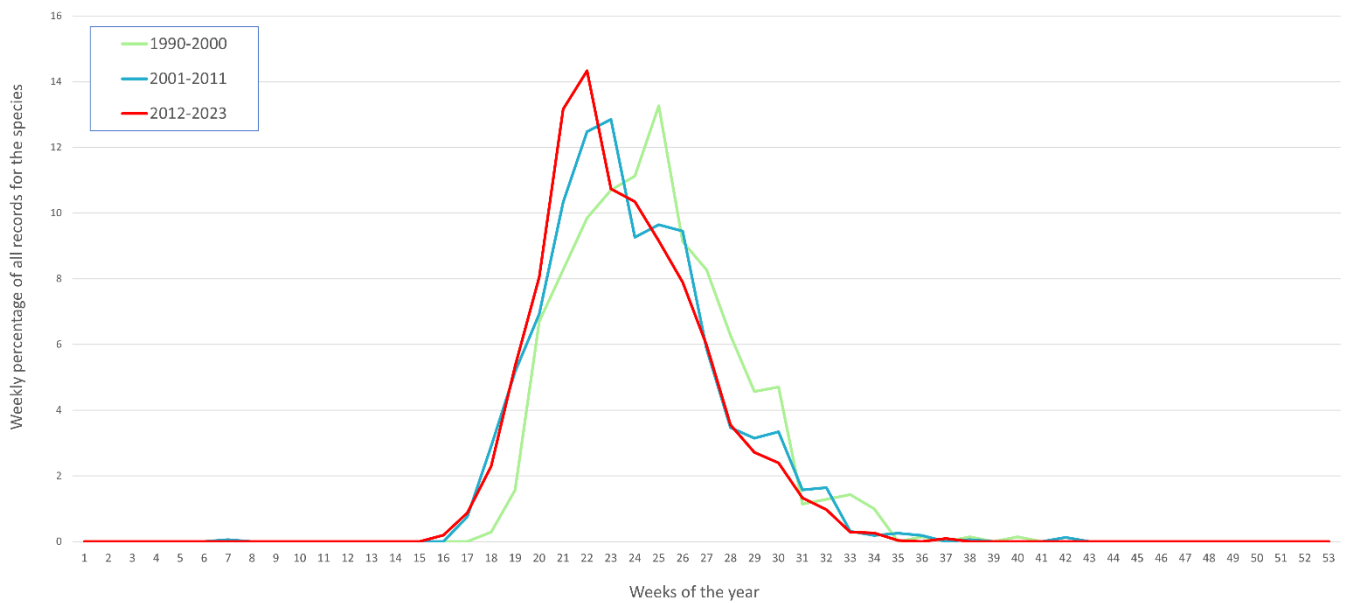
Azure Damselfly - north Britain only



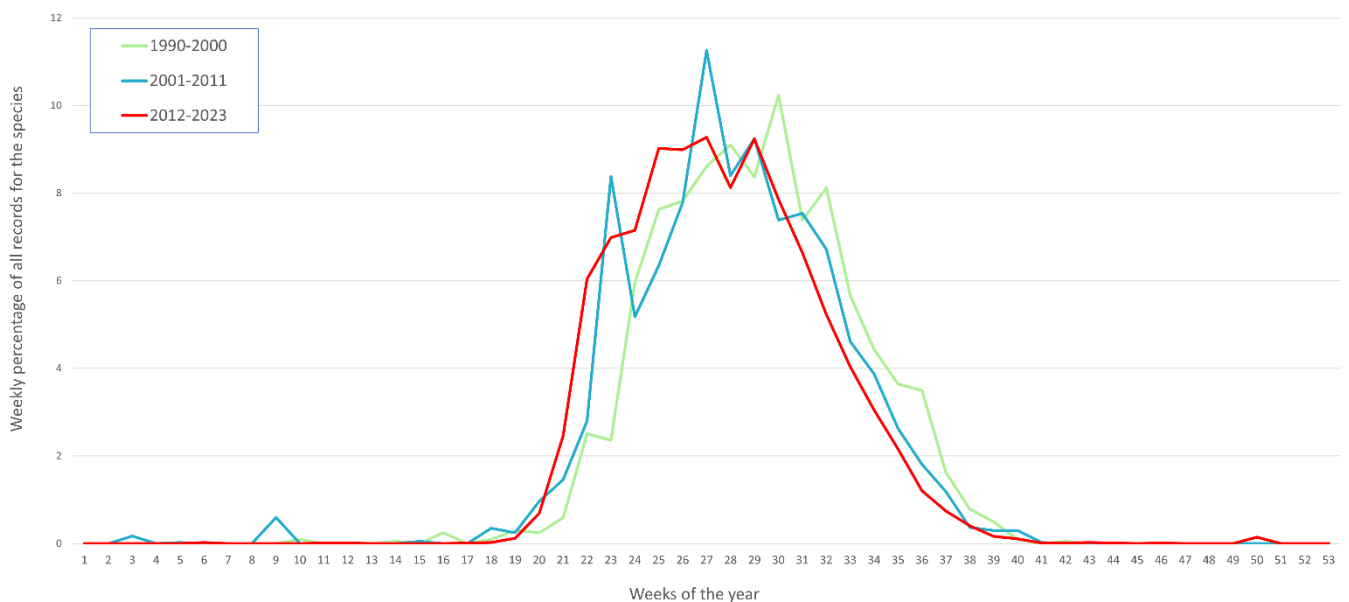
Azure Damselfly - south Britain only



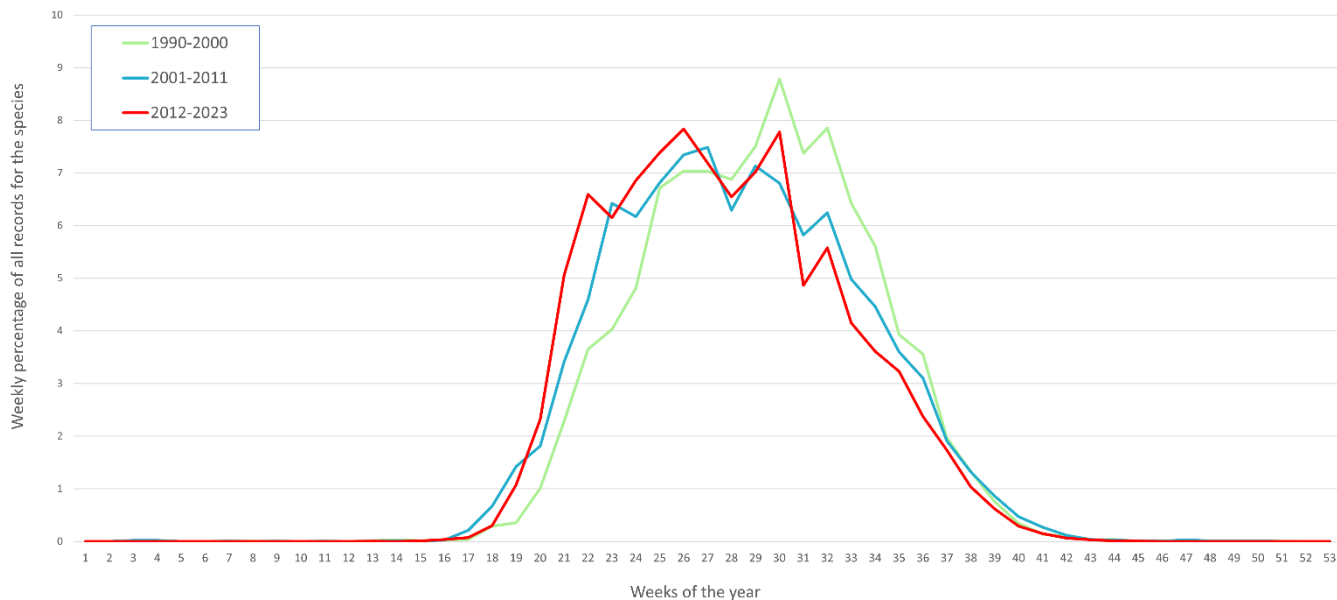
Variable Damselfly - south Britain only



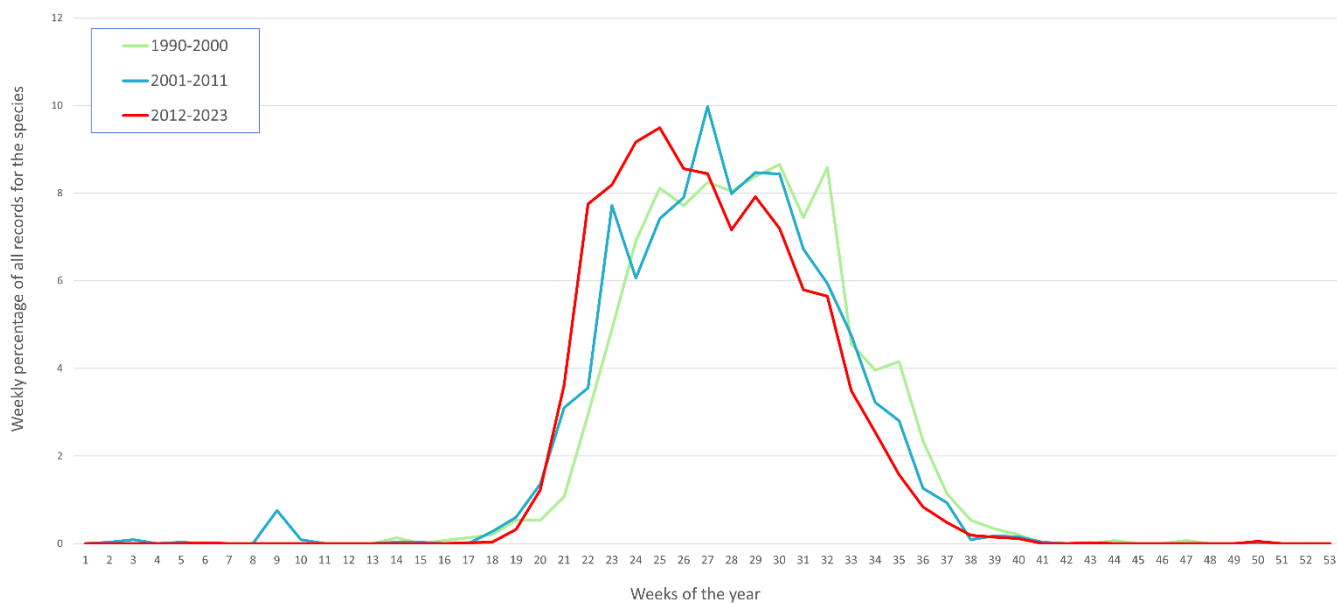
Common Blue Damselfly - north Britain only



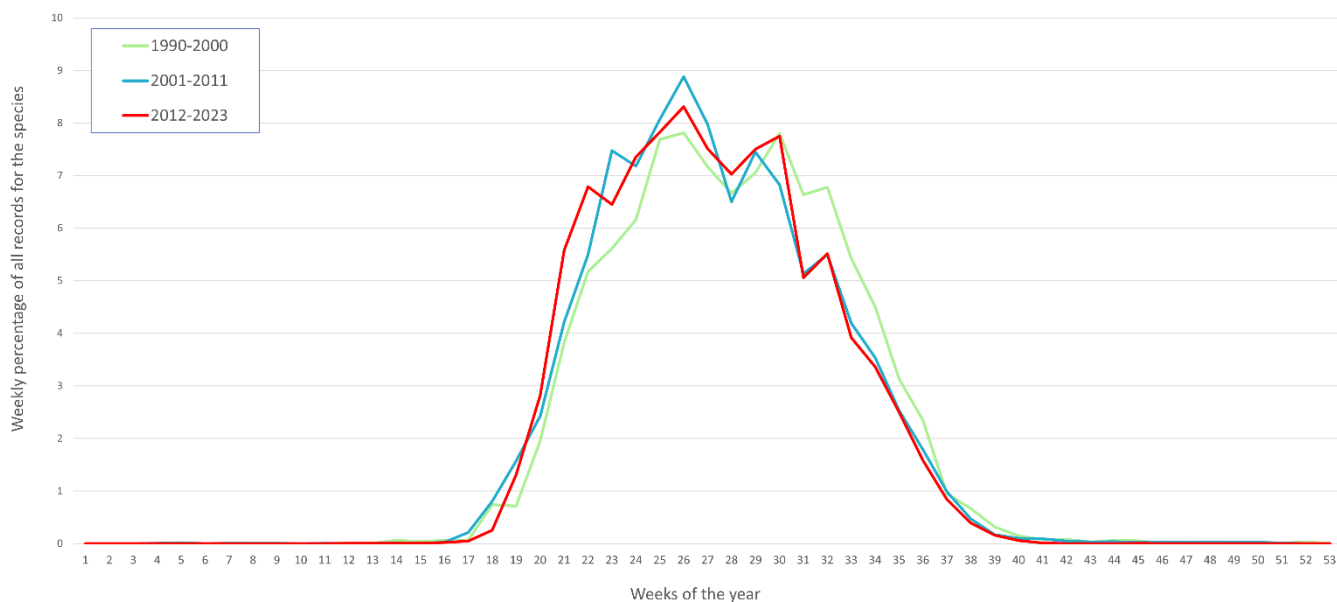
Common Blue Damselfly - south Britain only



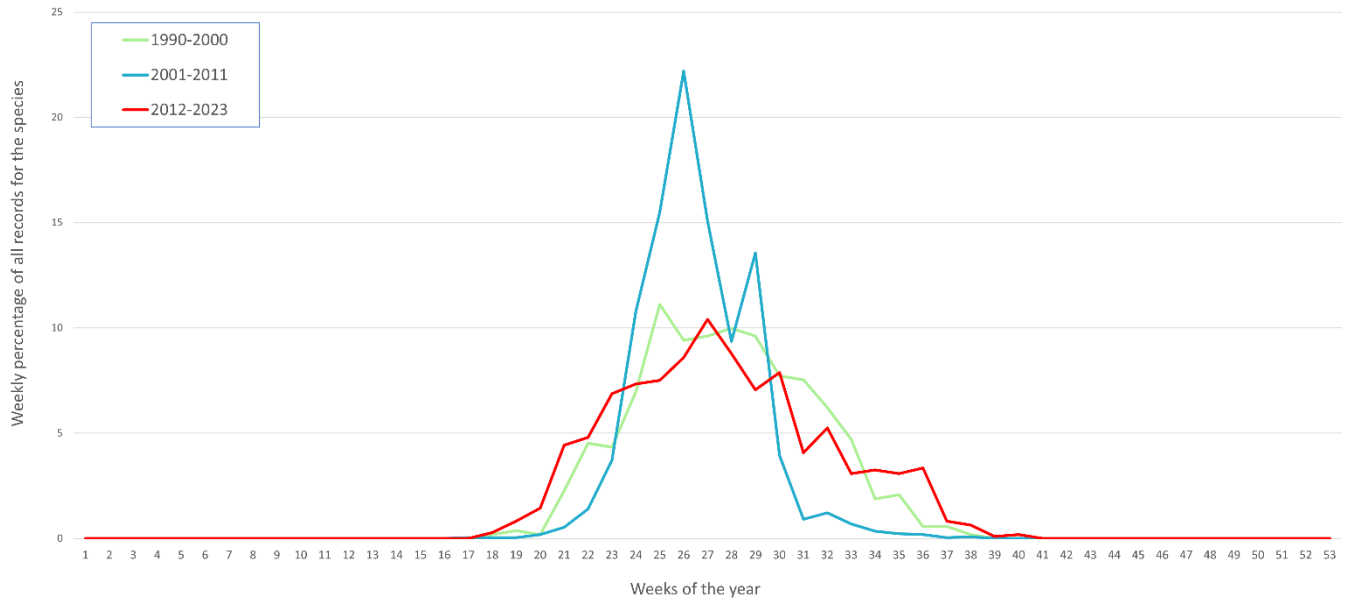
Blue-tailed Damselfly - north Britain only



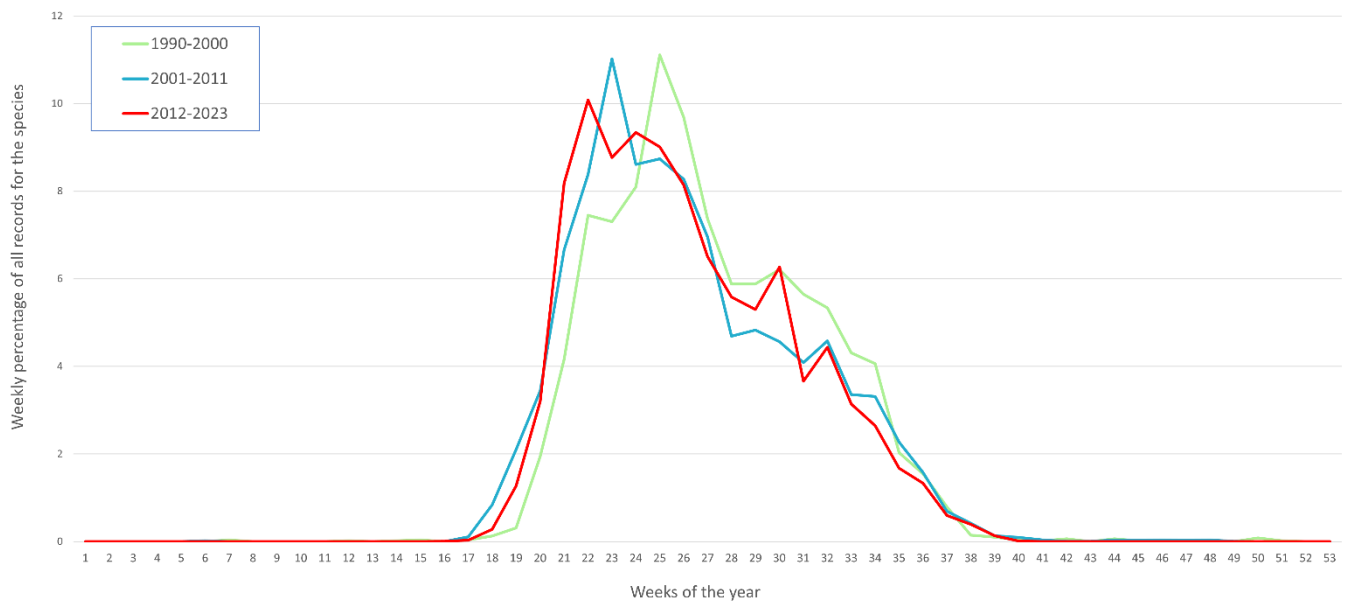
Blue-tailed Damselfly - south Britain only



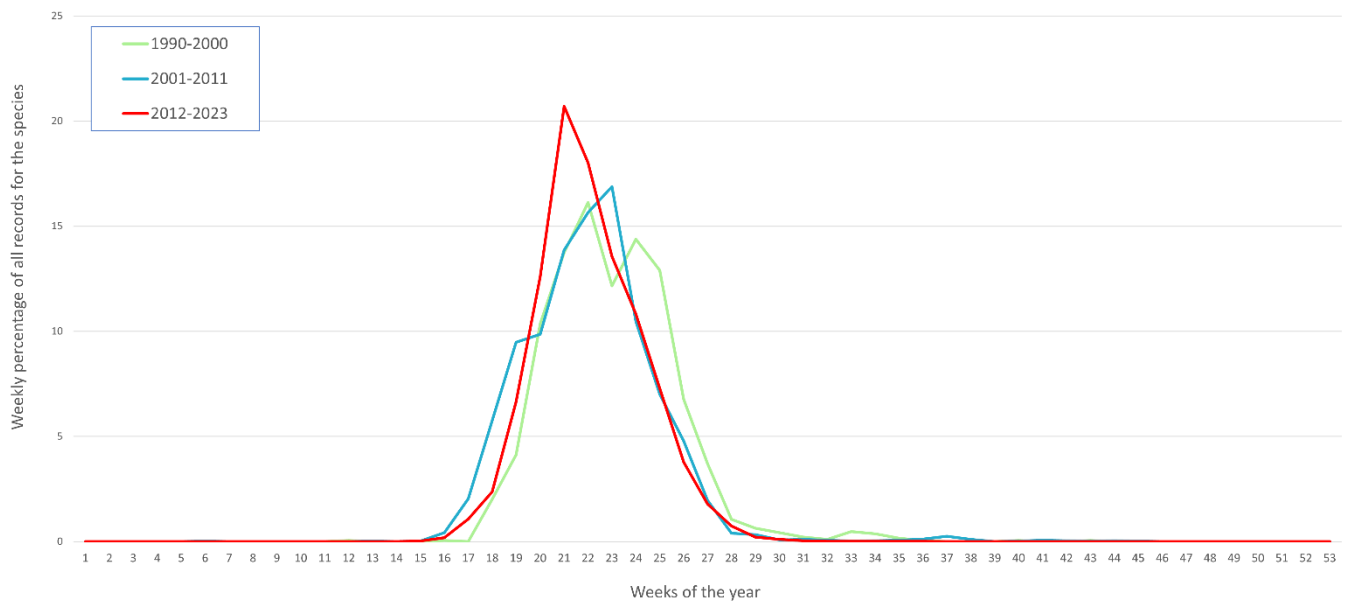
Scarce Blue-tailed Damselfly - south Britain only



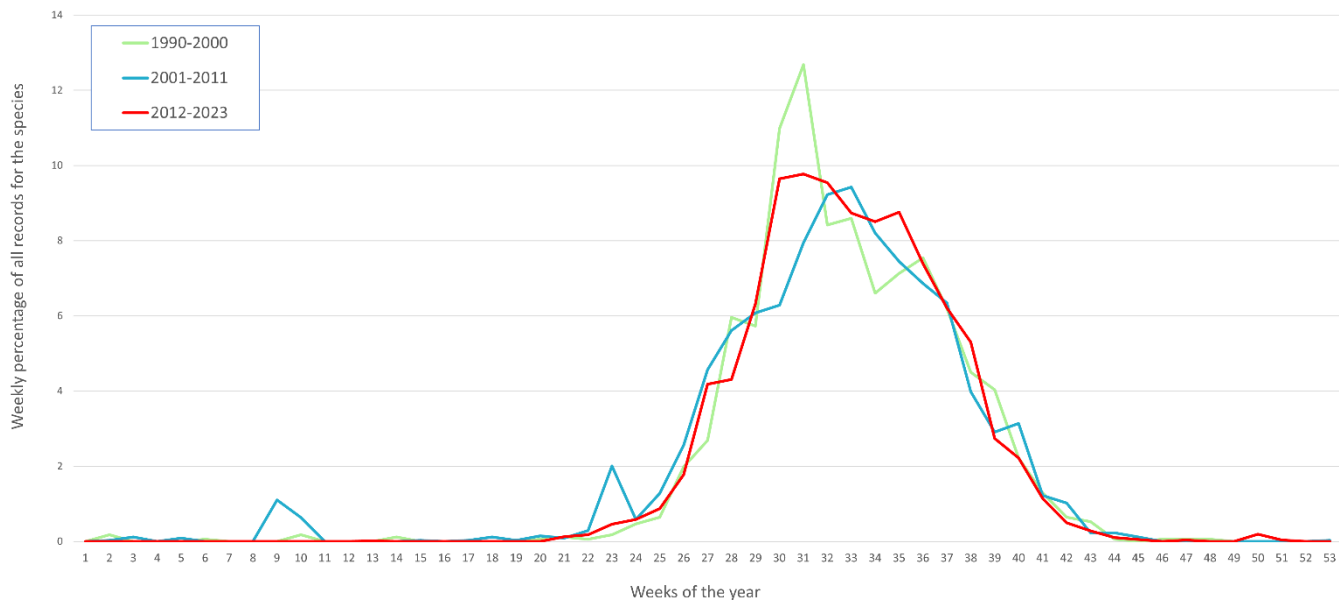
Red-eyed Damselfly - south Britain only



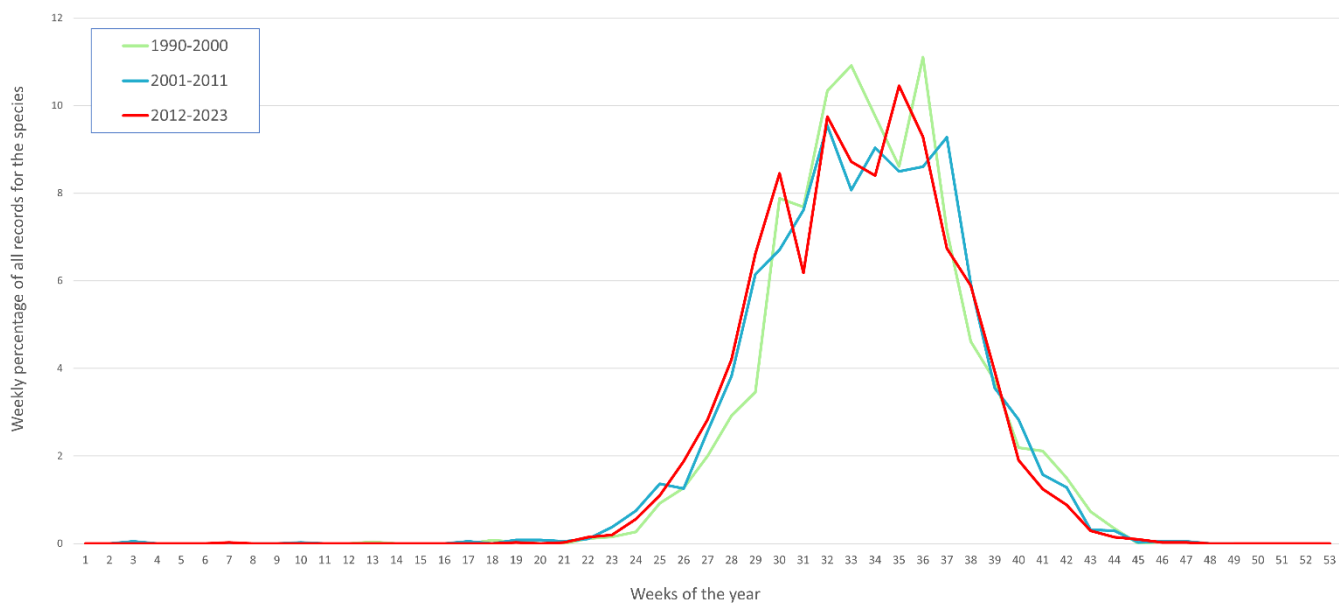
Hairy Dragonfly - south Britain only



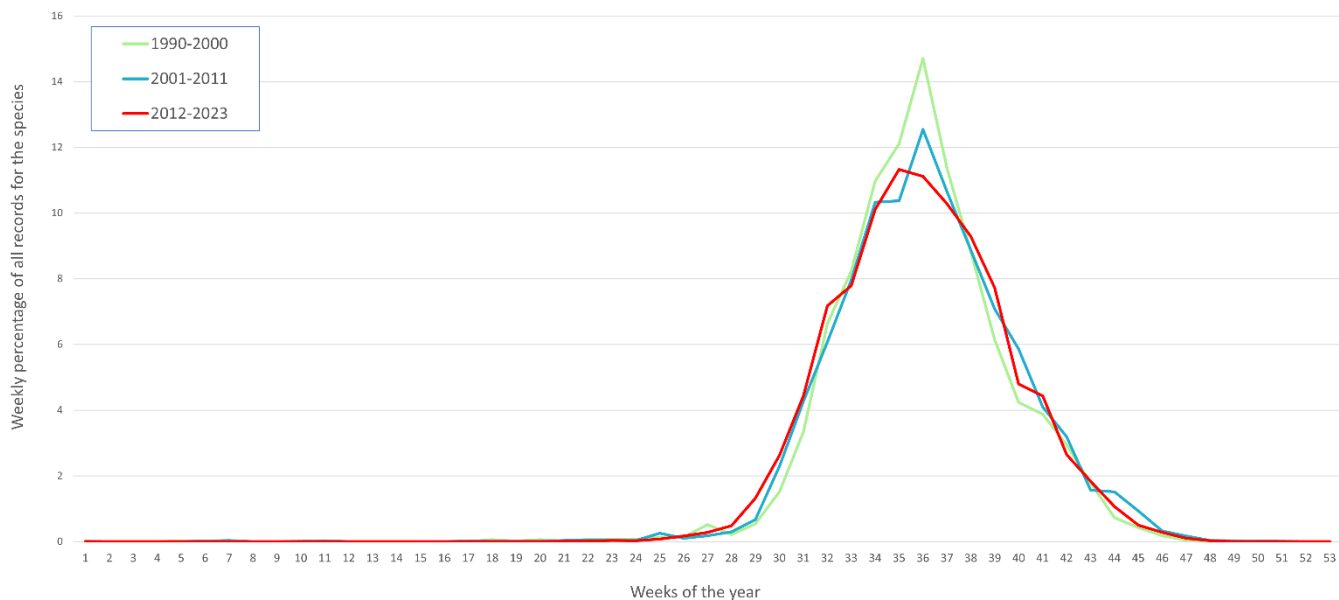
Common Hawker - north Britain only



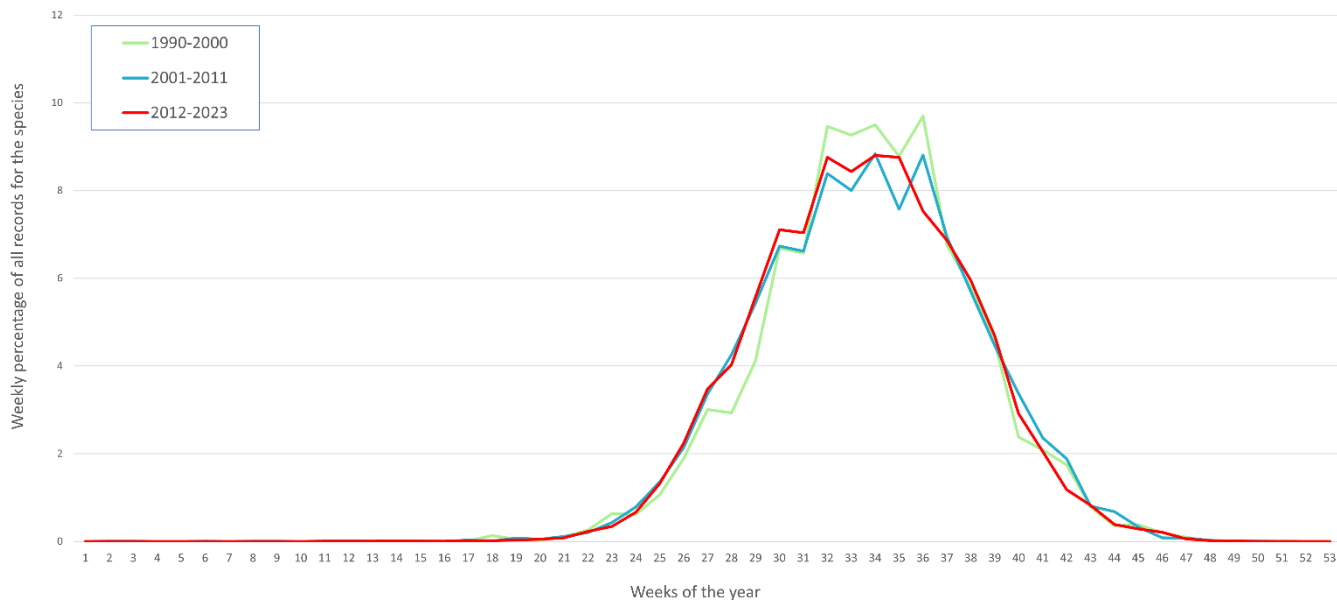
Common Hawker - south Britain only



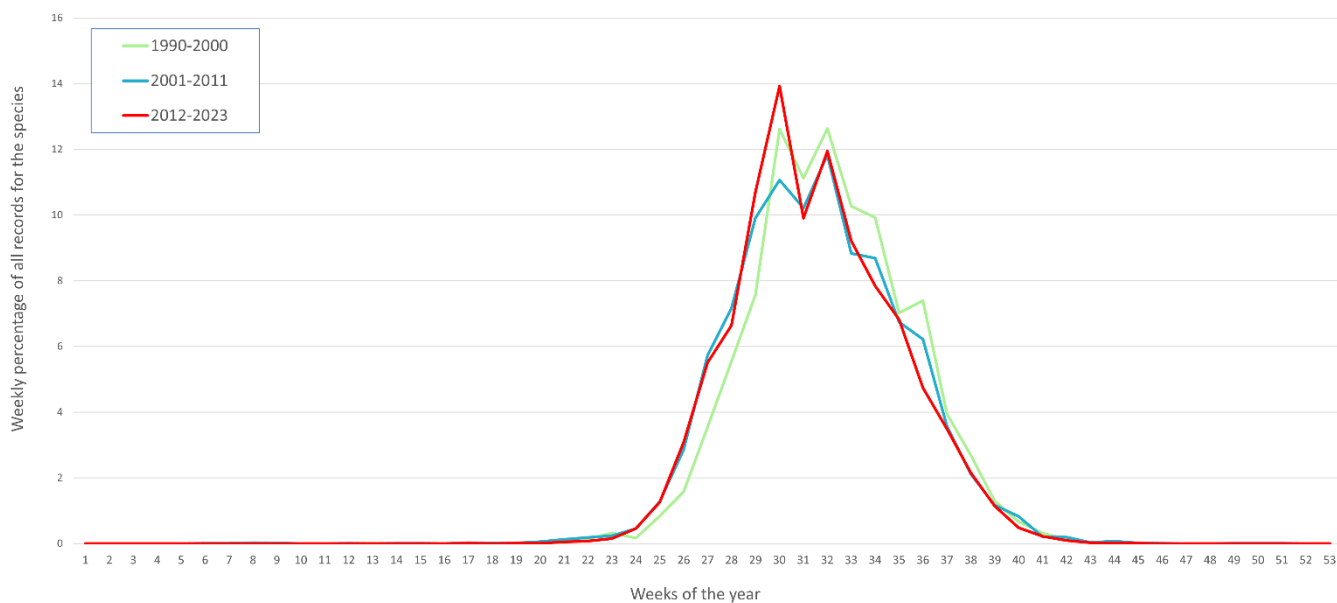
Migrant Hawker - south Britain only



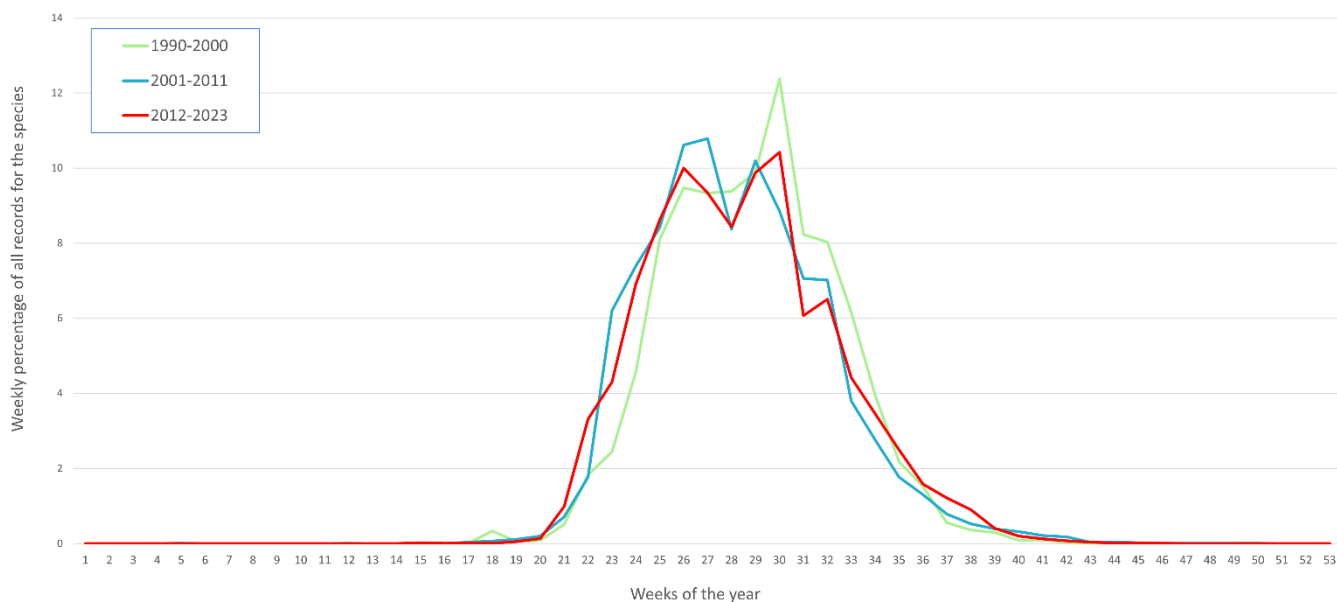
Southern Hawker - south Britain only



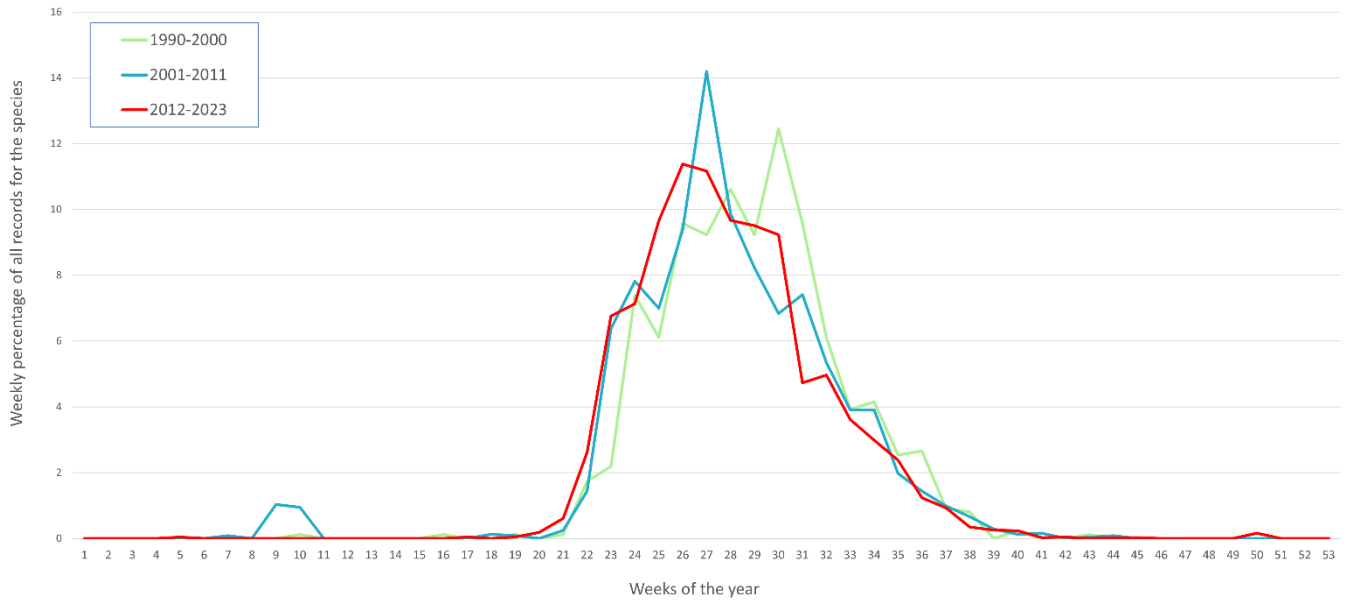
Brown Hawker - south Britain only



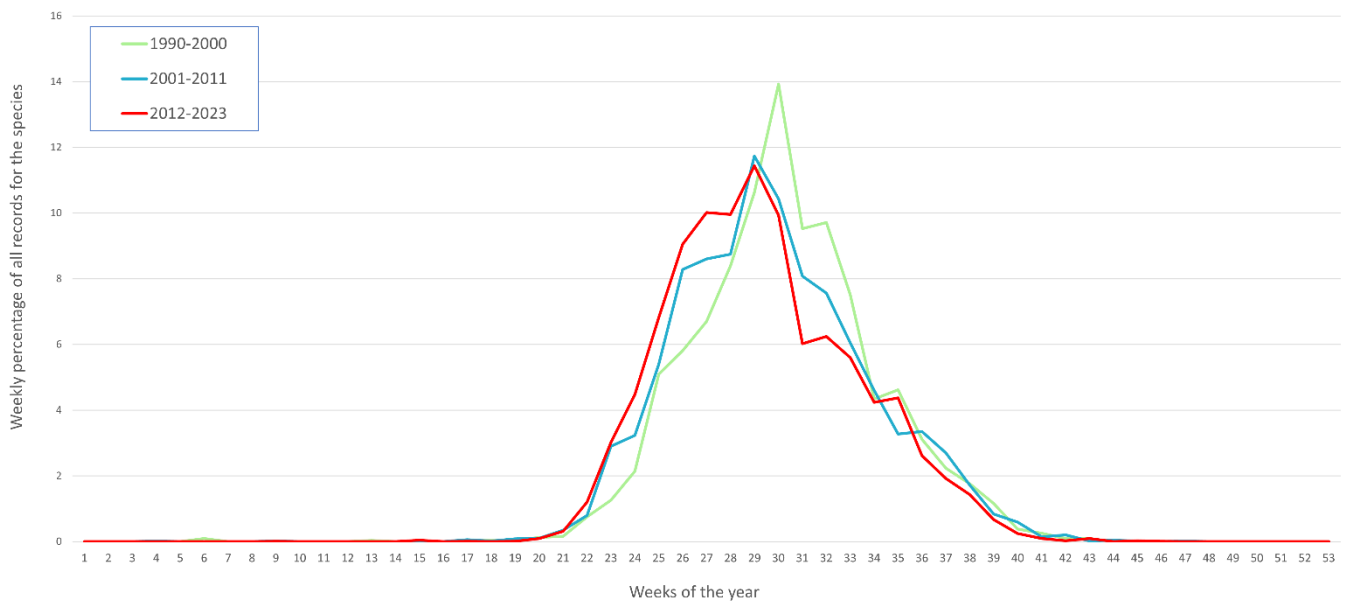
Emperor - south Britain only



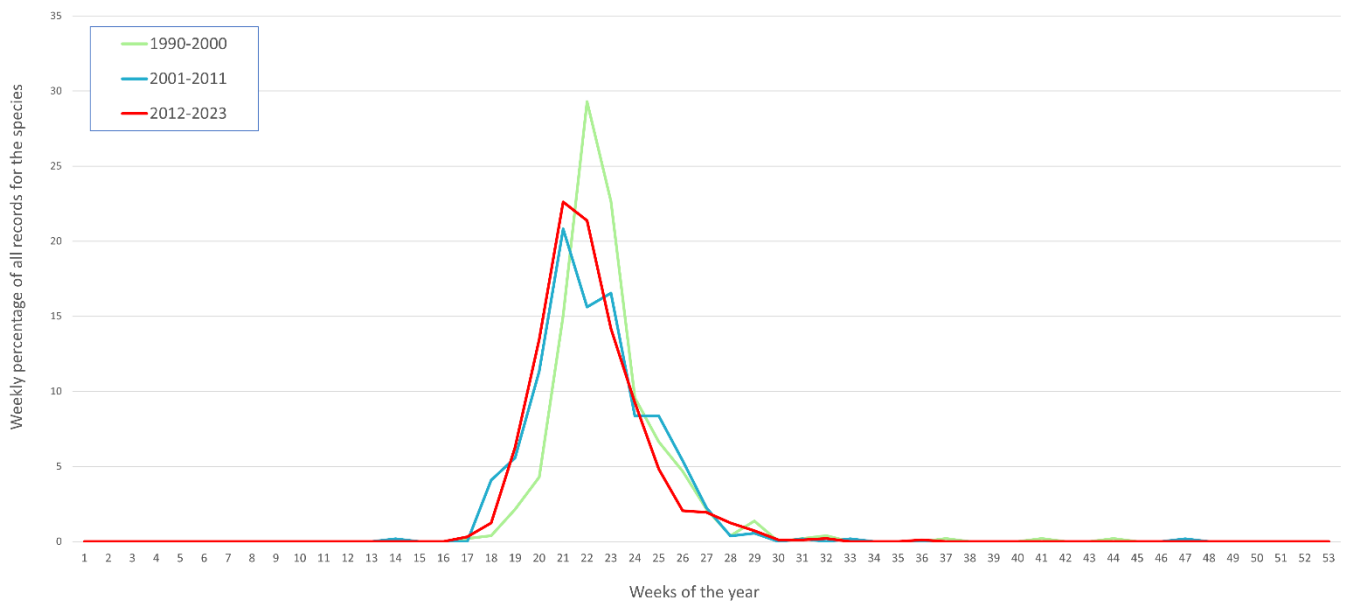
Golden-ringed Dragonfly - north Britain only



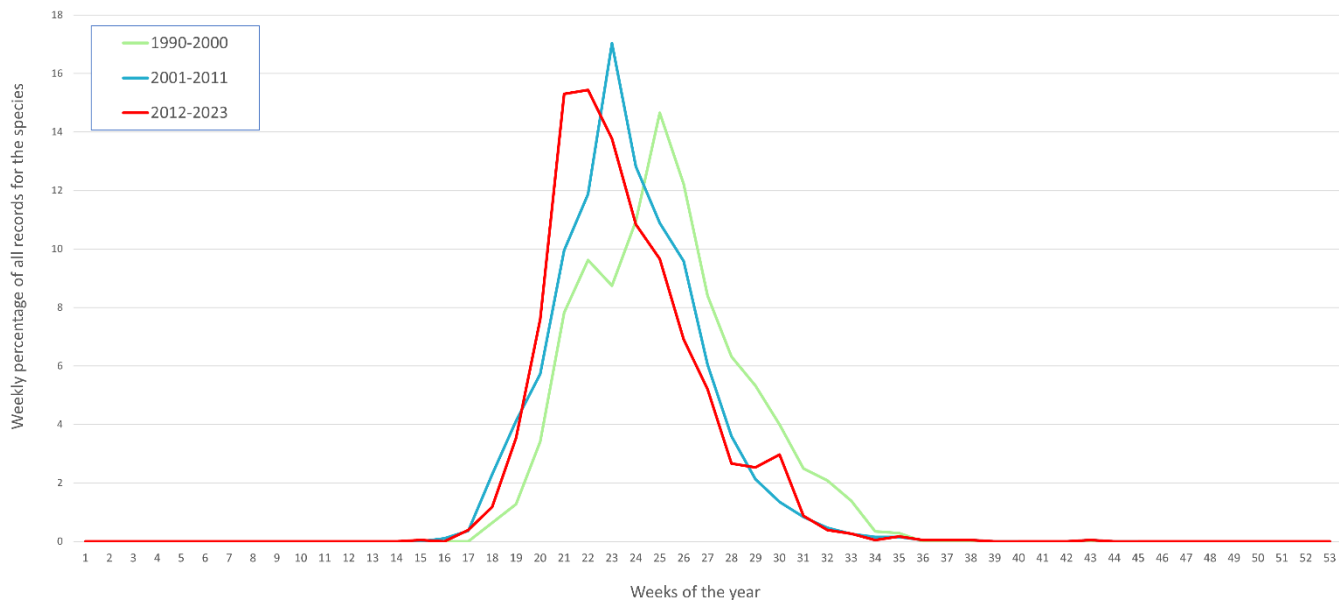
Golden-ringed Dragonfly - south Britain only



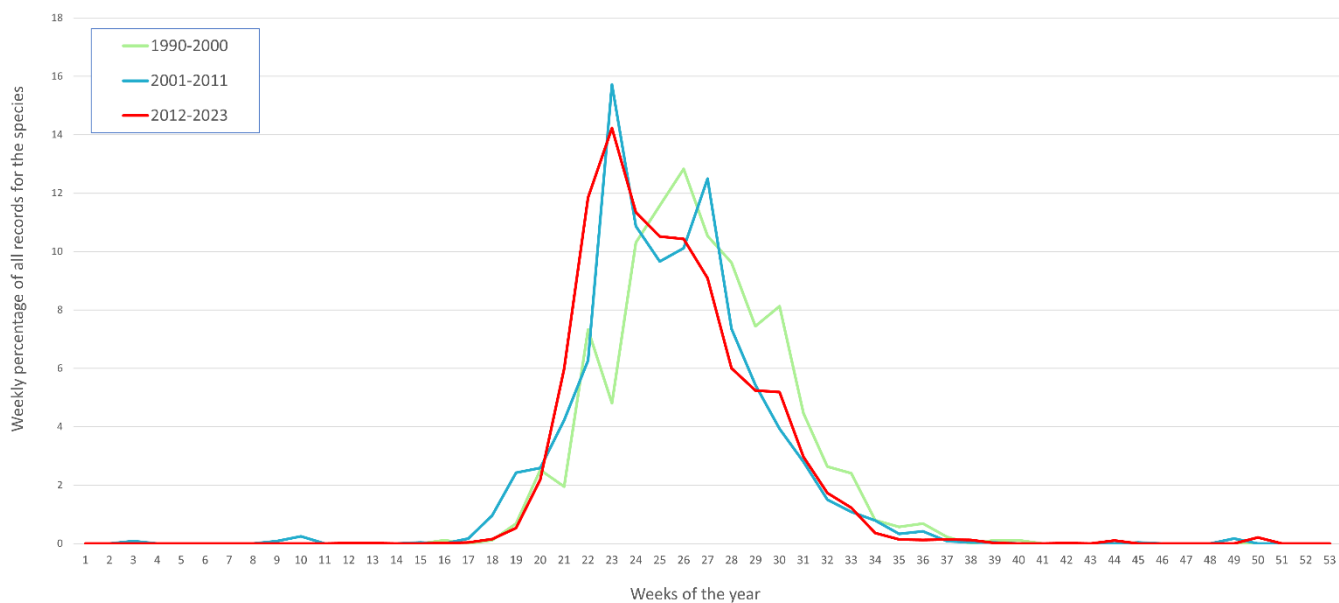
Common Clubtail - south Britain only



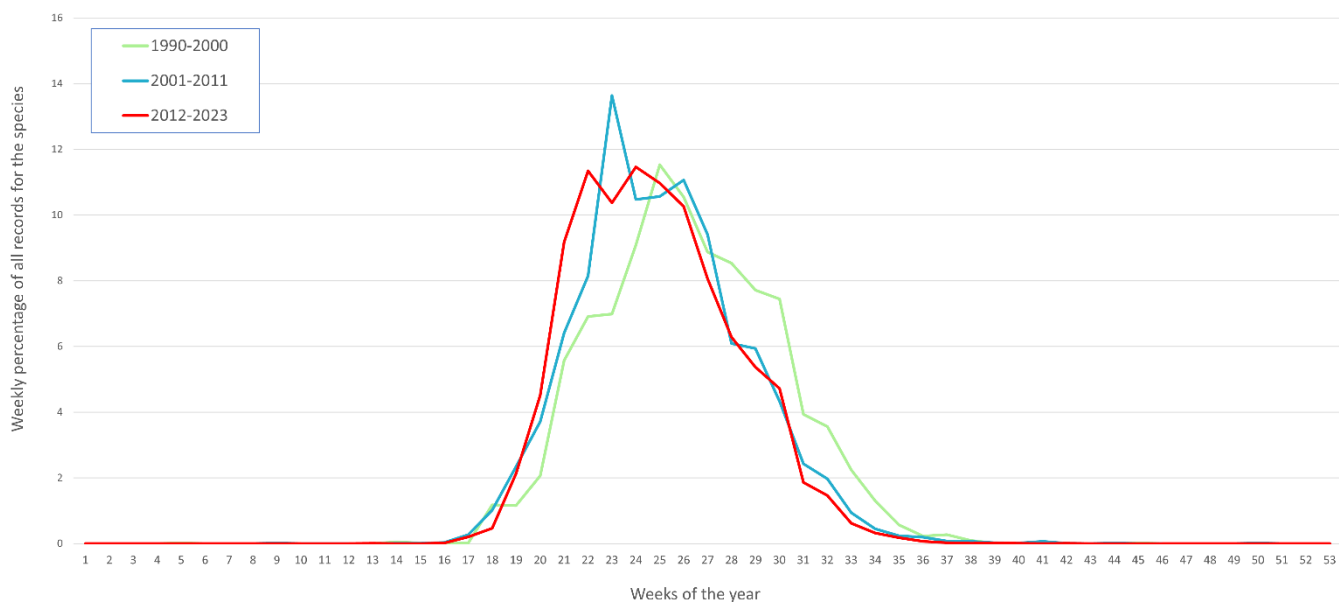
Downy Emerald - south Britain only



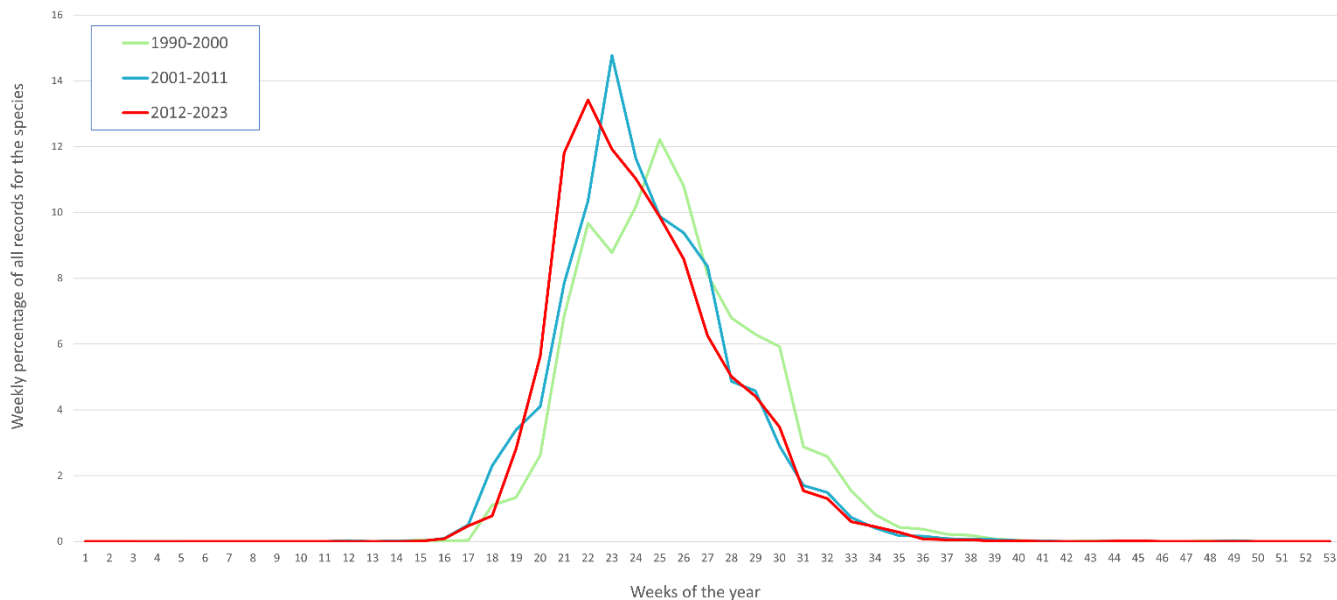
Four-spotted Chaser - north Britain only



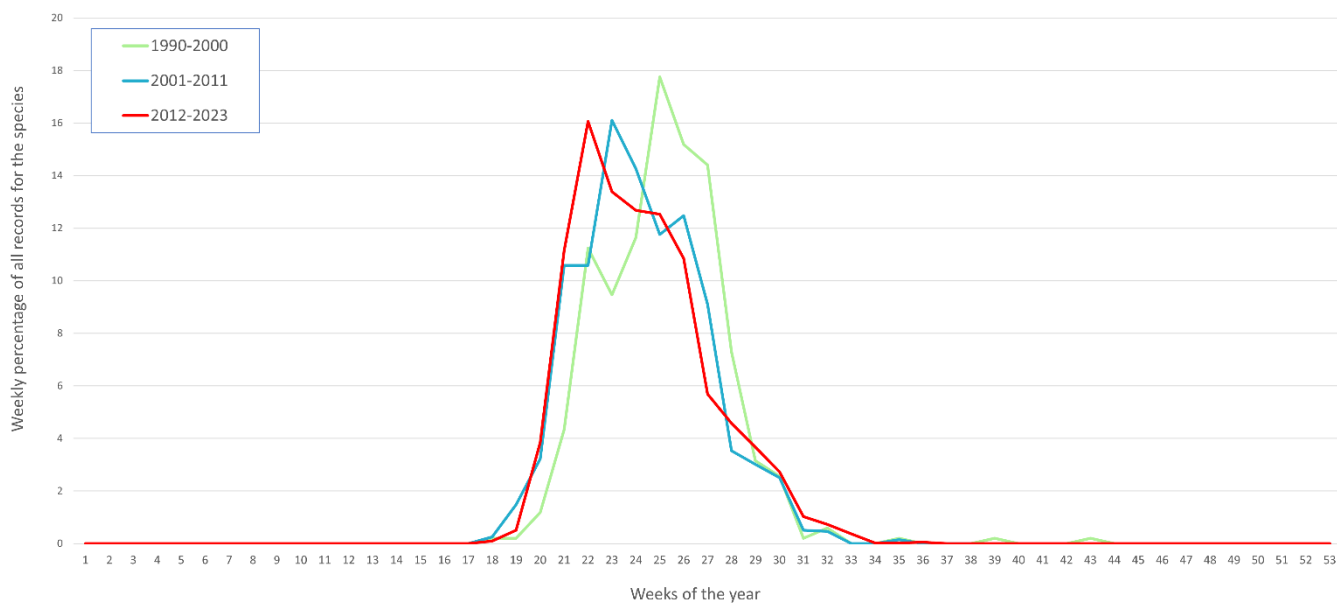
Four-spotted Chaser - south Britain only



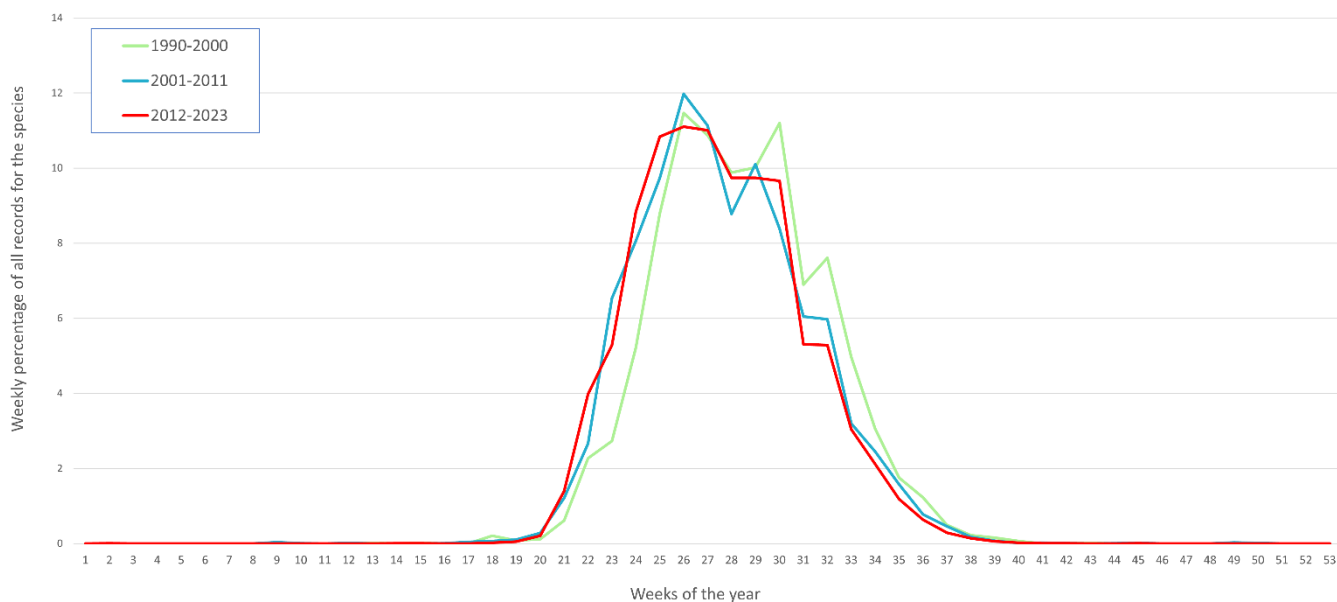
Broad-bodied Chaser - south Britain only



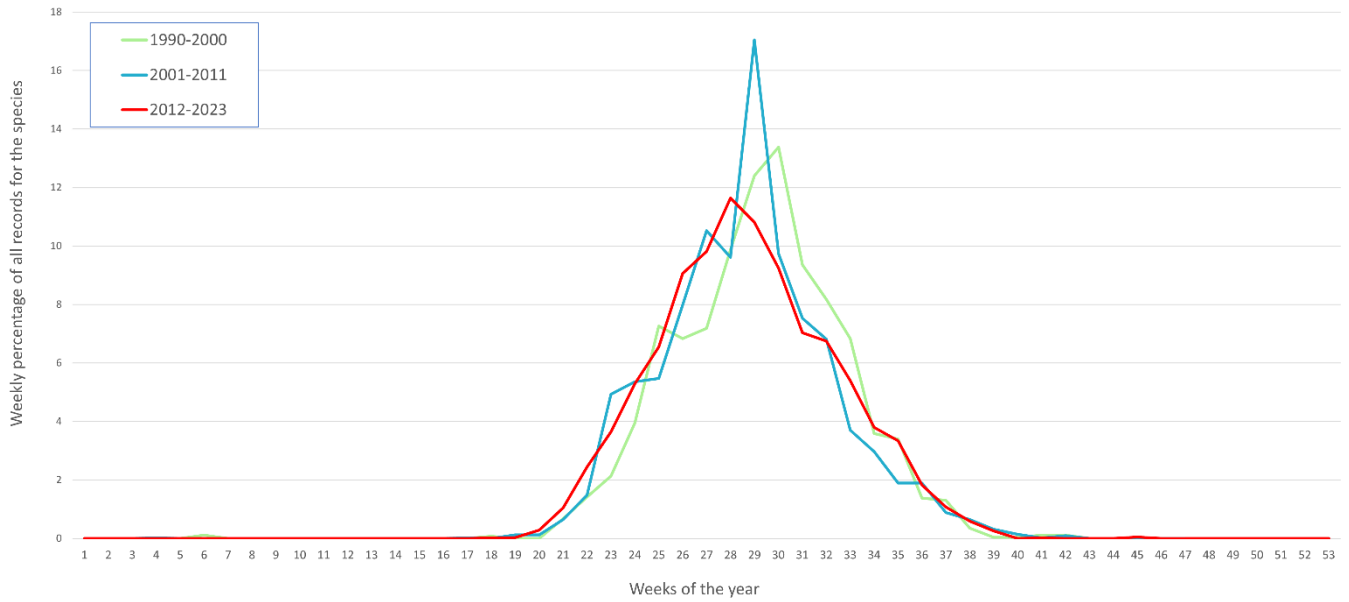
Scarce Chaser - south Britain only



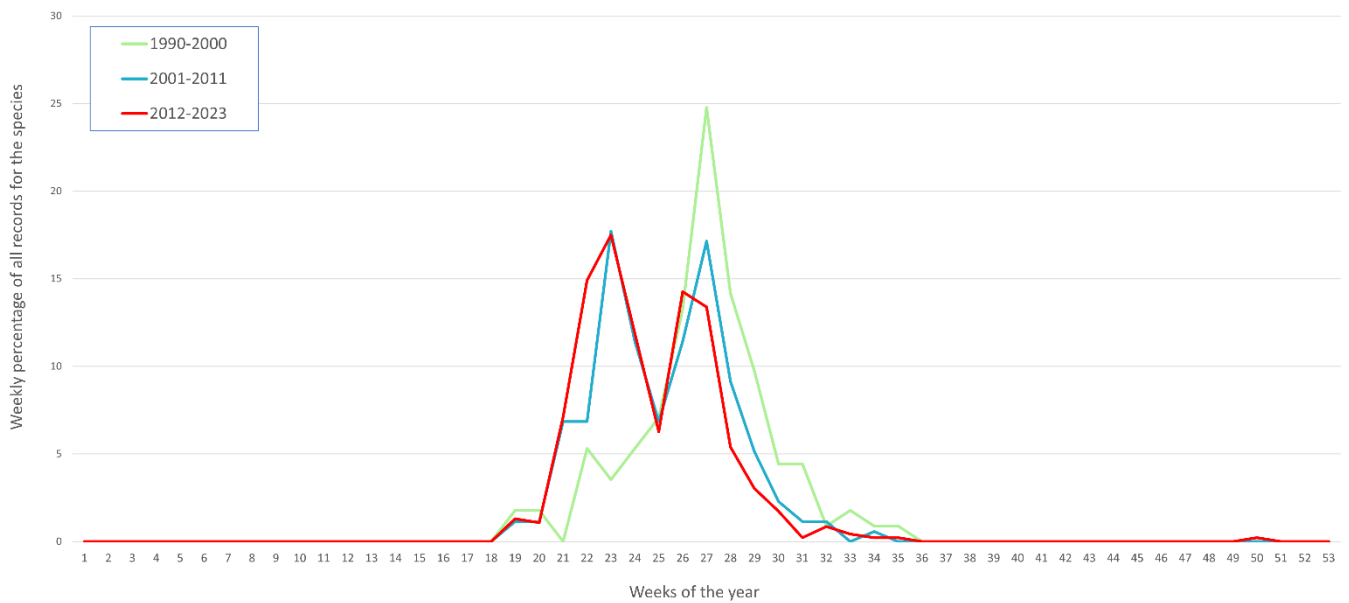
Black-tailed Skimmer - south Britain only



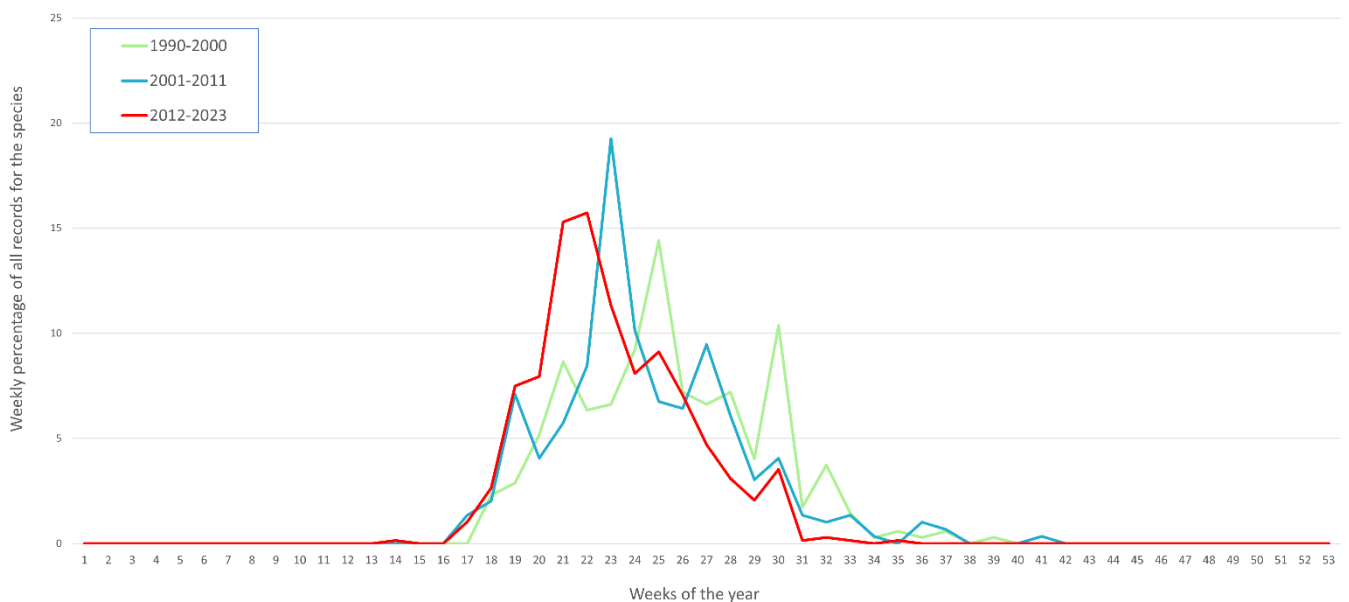
Keeled Skimmer - south Britain only



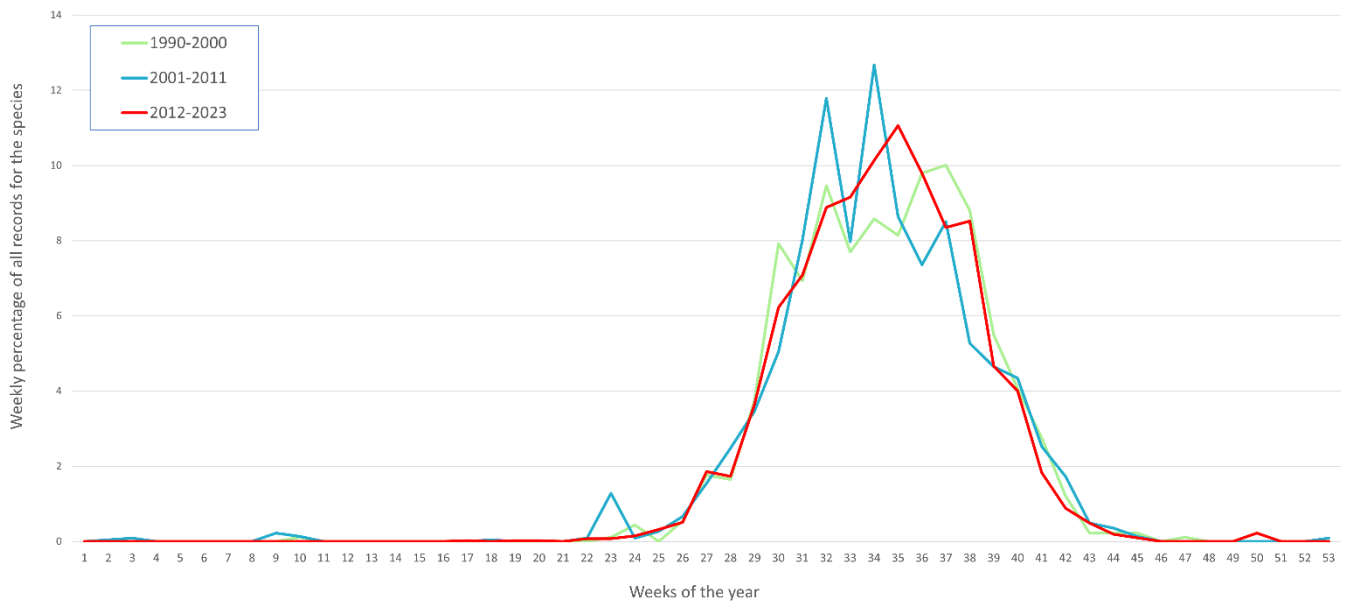
White-faced Darter - north Britain only



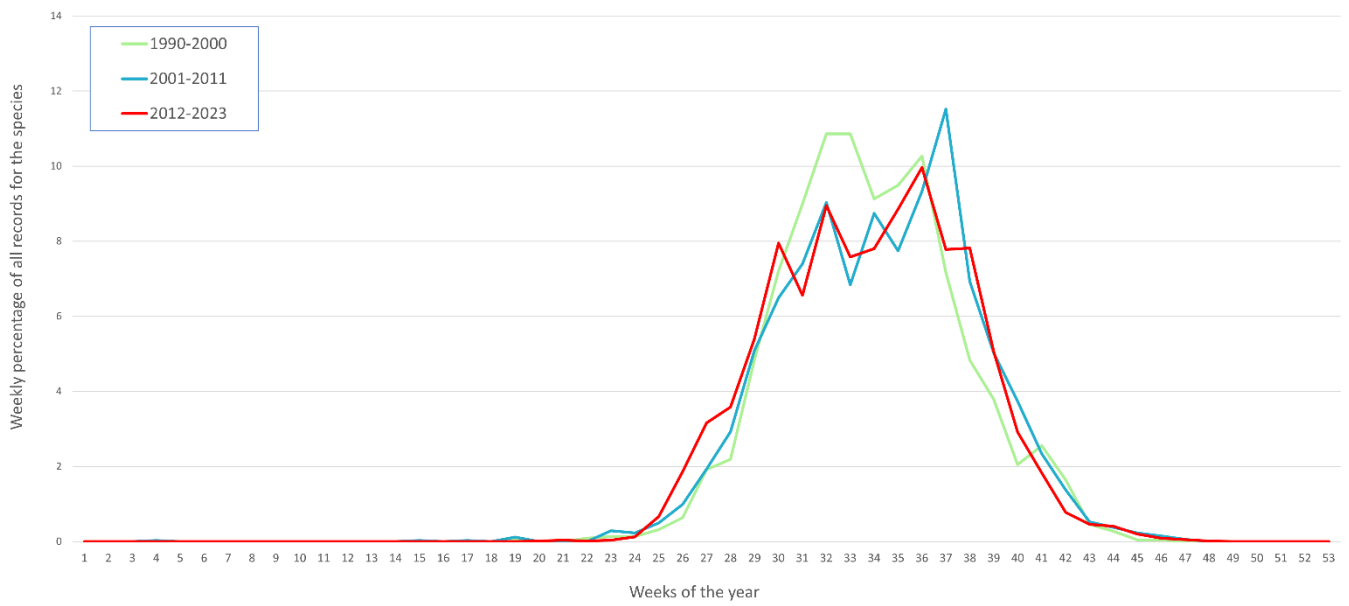
White-faced Darter - south Britain only



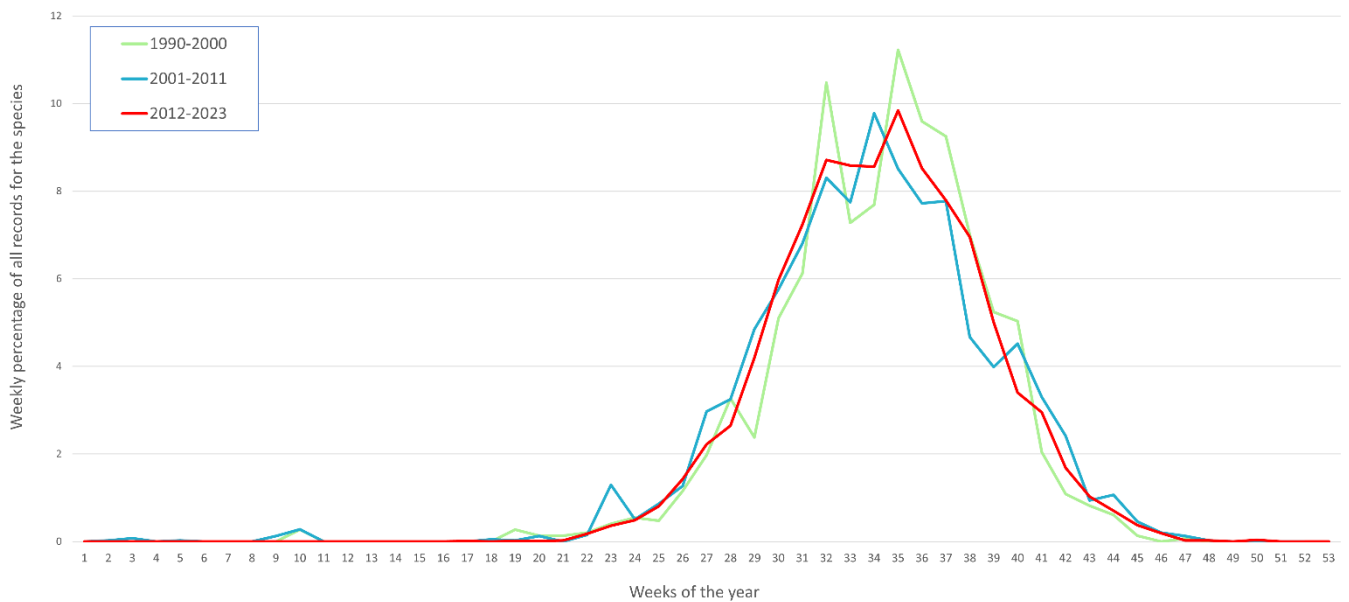
Black Darter - north Britain only



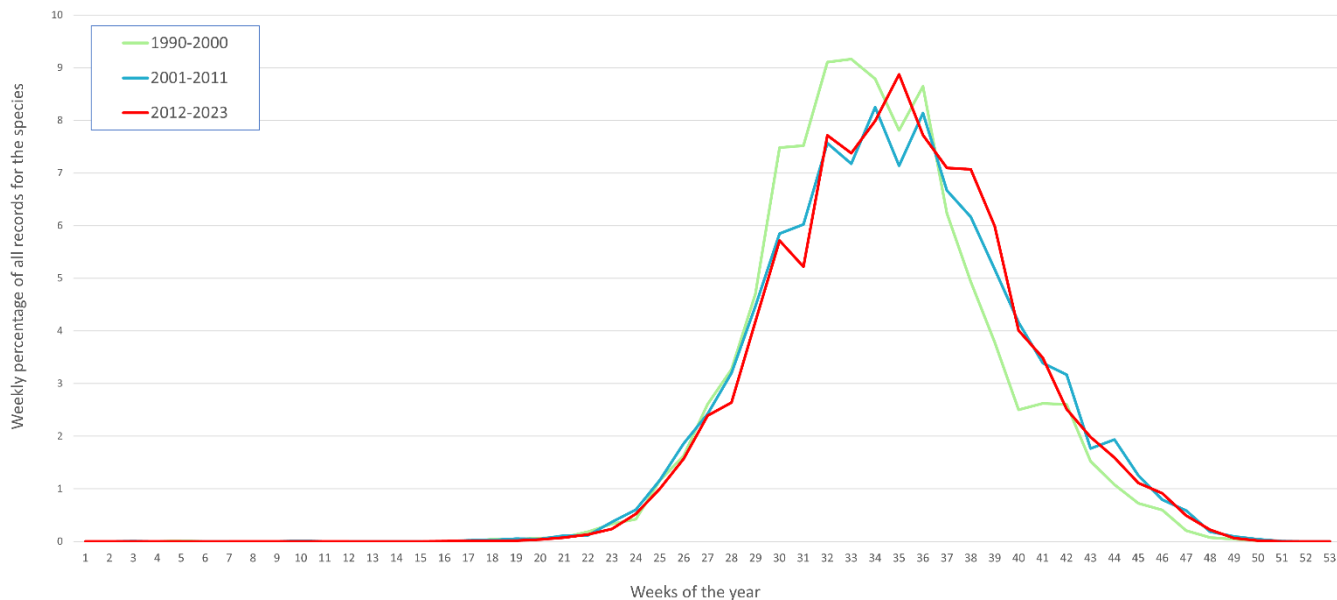
Black Darter - south Britain only



Common Darter - north Britain only



Common Darter - south Britain only



Ruddy Darter - south Britain only

