

Chokka squid commercial jig CPUE indices by month and pack size category.**Deon Durholtz¹**

The revision of the squid assessment model requires monitoring of the resource and fishery at monthly intervals, with input data (catch and abundance) categorised by size. A preliminary evaluation of squid jig nominal CPUE by month and size category has been requested.

While catch is reported by the fishery at the level of fishing sessions (i.e. periods where a set number of crew are fishing on a given vessel), the corresponding catch is not reported by size category. However, “pack” data collected from squid processing establishments (factories) are reported by size category, and consequently allow for an estimate of monthly catch by size (pack) category. Note that these data are reported per landing, with the month of the catch then being assigned to the month of the landing. Effort is reported by the fishery in the commercial logbooks at the level of fishing sessions. For each vessel, there may be one or more fishing sessions per day with varying numbers of crew fishing during each session. Effort is calculated as the maximum number of crew that fished on a given day and expressed as “person-days”. These data can then be accumulated over the entire fleet per month, which then allows for the calculation of a nominal CPUE index per month and size category (see Figure 1).

Note in Figure 1:

1. “Pack” data are not available for all months of all years considered. Efforts are being directed at addressing this short coming.
2. The generally low CPUE values for November (month 11) are an artefact resulting from the October – November closed season. Vessels begin fishing as soon as the closed season ends in late November, but typically only land the catch in early December. So, while effort data are available for November, the corresponding catch is assigned to December (because the pack data are linked to the landing date, not the catch dates). Efforts will be directed at linking the factory pack data per landing to the corresponding effort data reported for that trip to allow for a proportional “splitting” of the pack data between the months where effort was recorded during the trip.

¹ Dept of Forestry, Fisheries & Environment

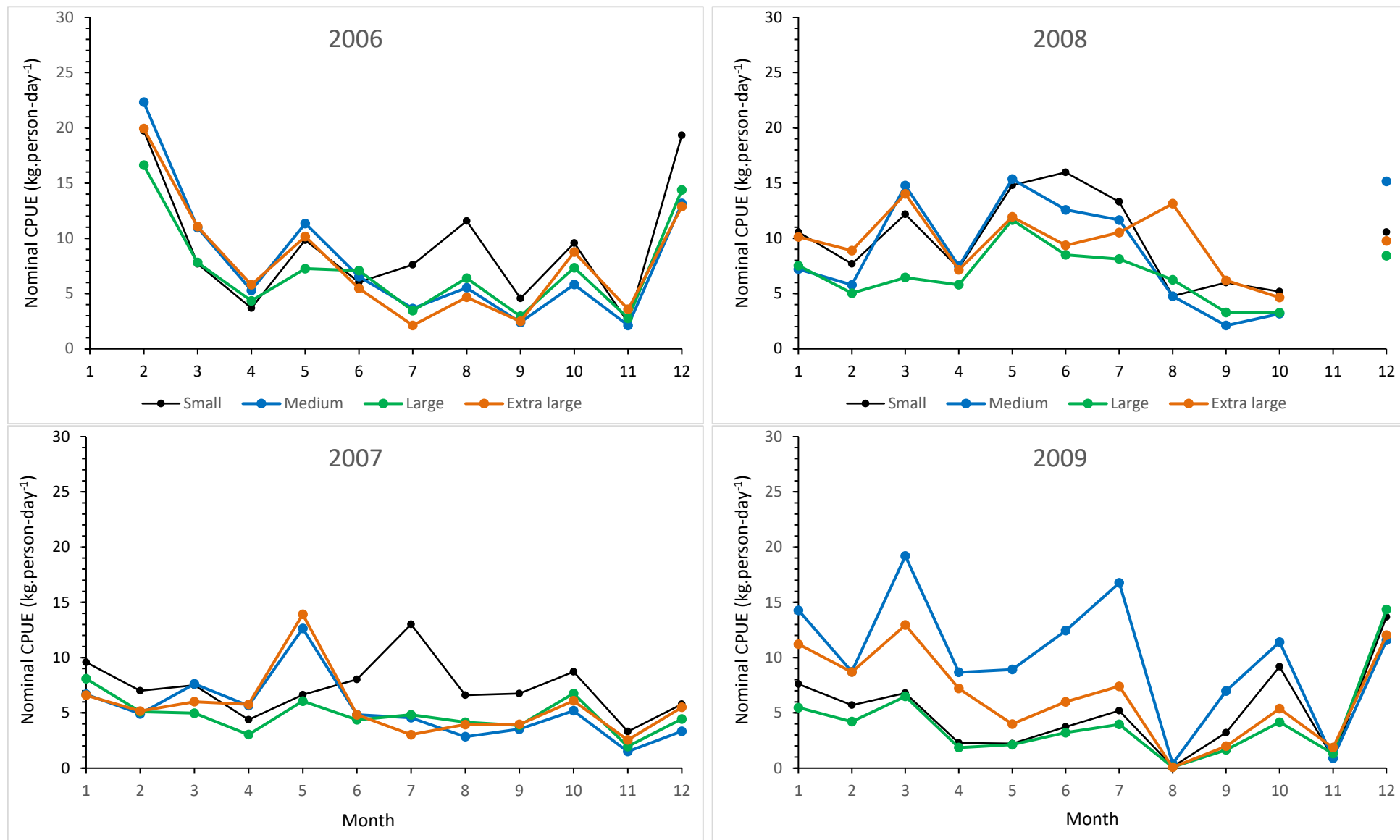


Figure 1: Commercial jig nominal CPUE indices by month and “pack” category per annum.

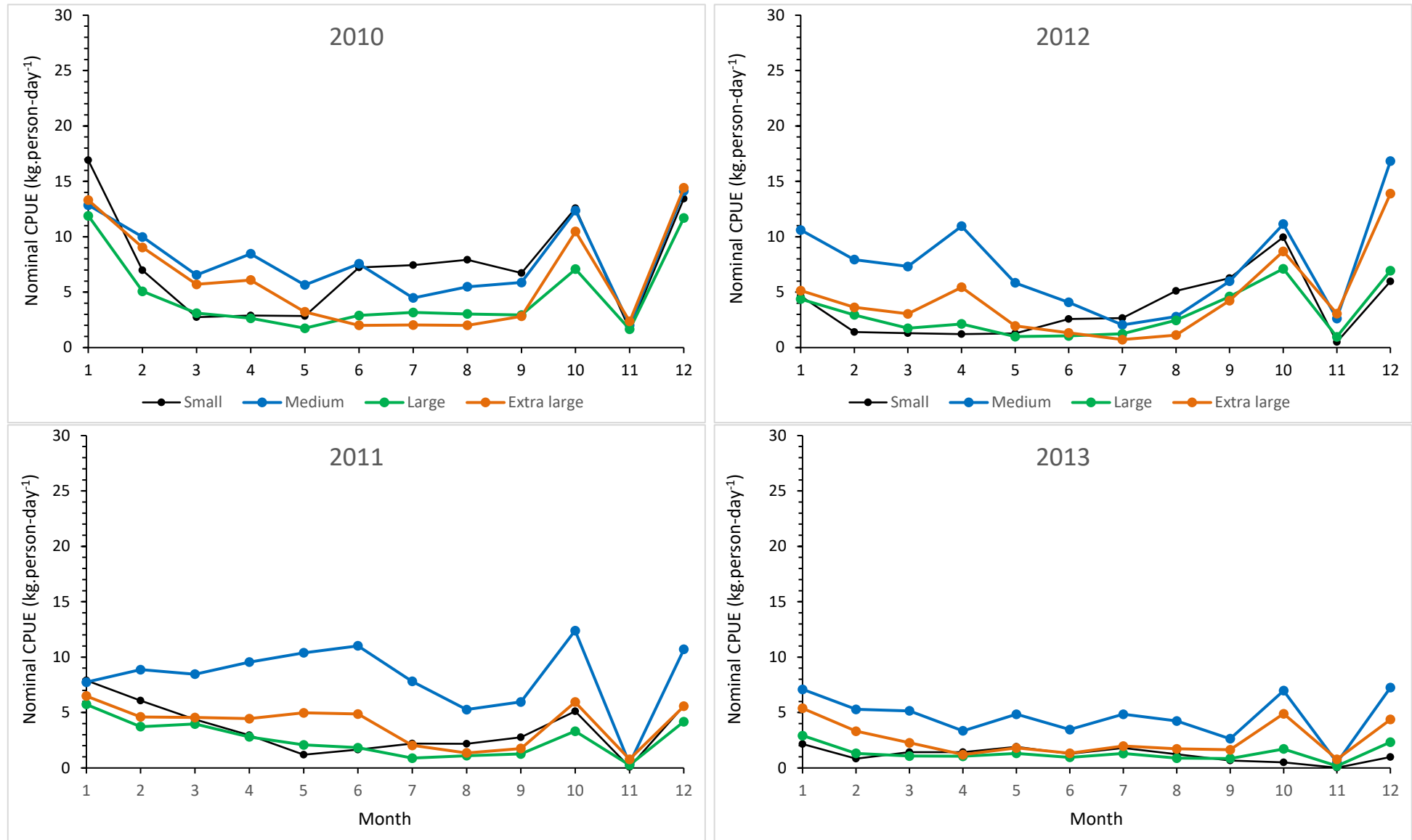


Figure 1: Continued

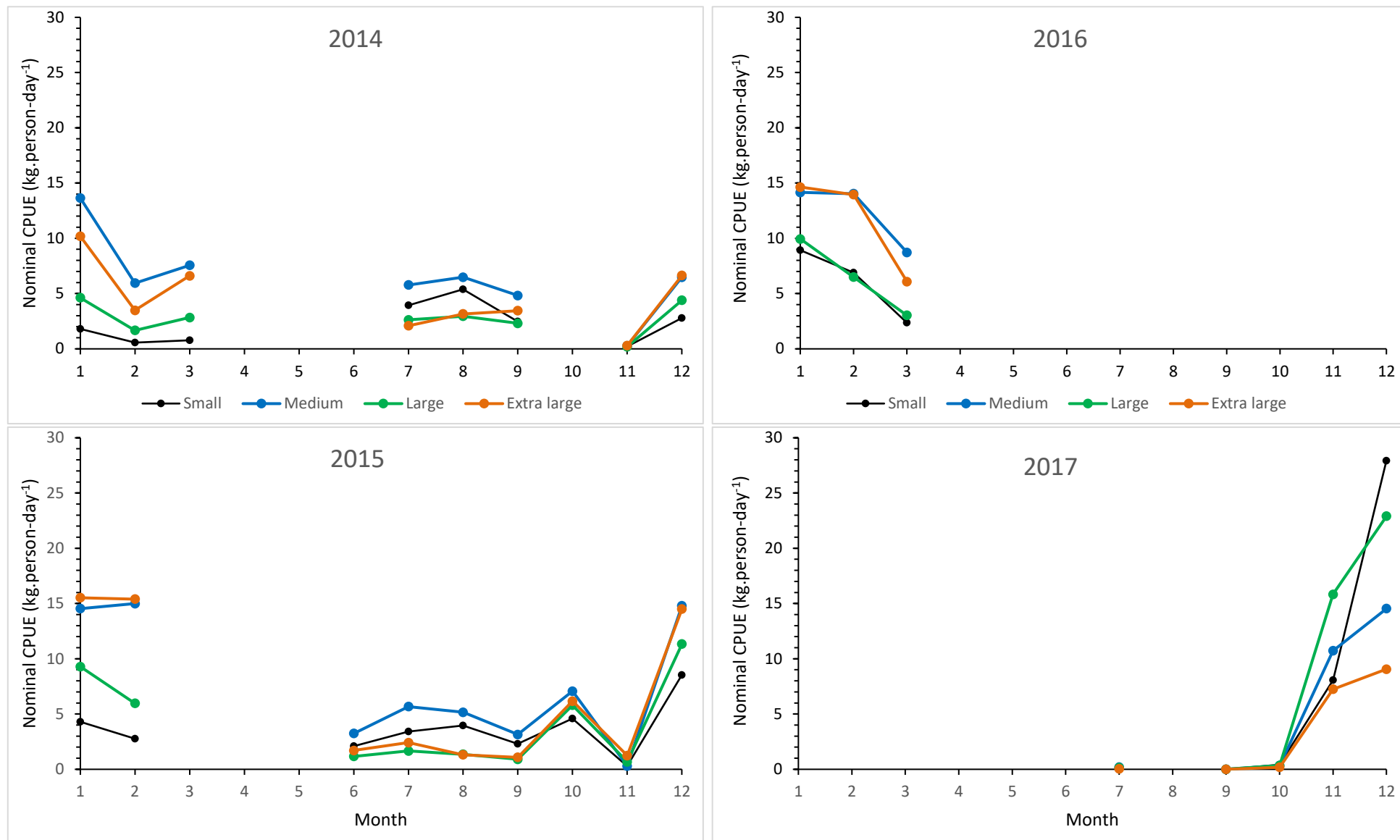


Figure 1: Continued

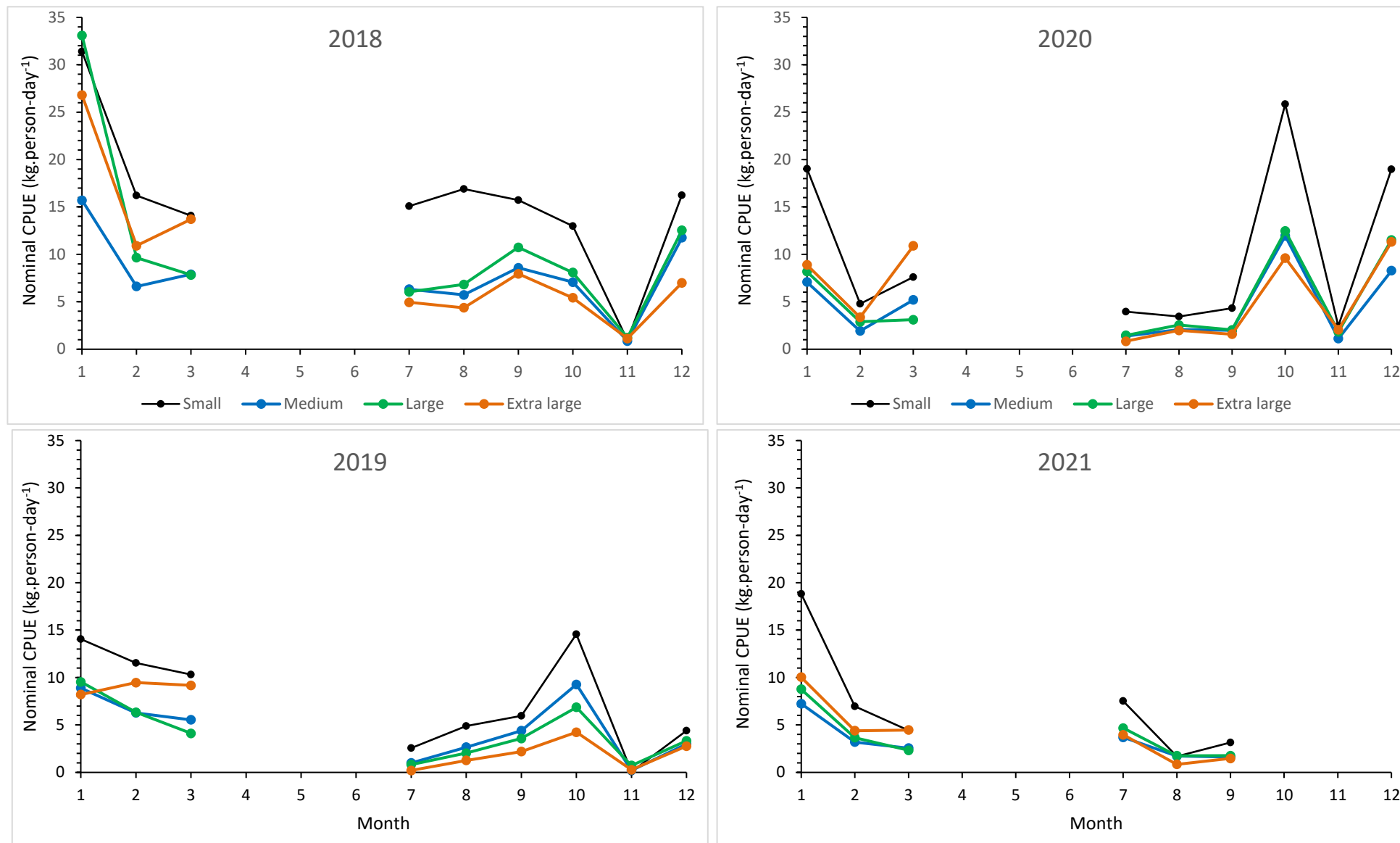


Figure 1: Continued