Figures

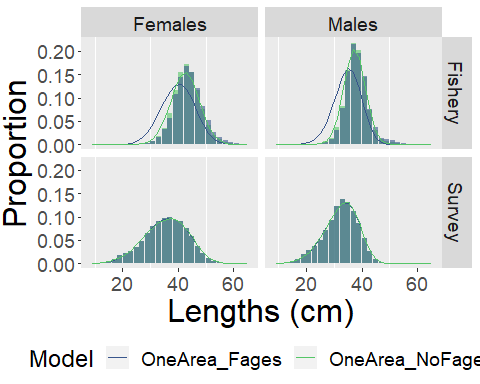


Figure 1. Fits (lines) to female and male length composition data aggregated by year (shaded regions) for the one area model without fishery ages included in model inputs (green) and with fishery ages included in model inputs (blue).

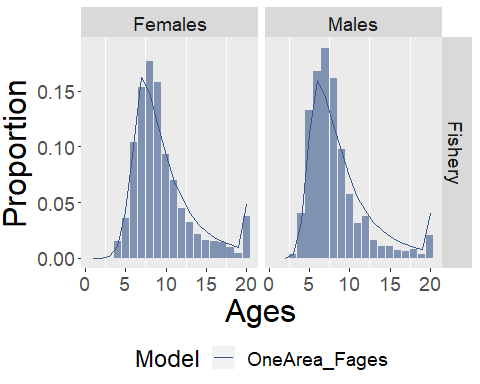


Figure 2. Fits (lines) to female and male fishery age composition with data aggregated by year (shaded regions) for the one area model with fishery ages included in model inputs.

## [1] "unique IDs match number of rows"

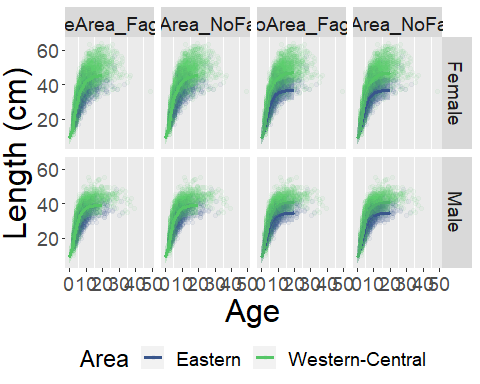


Figure 3. Raw bottom trawl survey data length-at-age by area and sex, overlayed with mean length-at-age for each model (columns) and 90% asymptotic uncertainty intervals around the means (shaded areas). The Eastern GOA is shown in green and the Western-Central GOA is shown in blue.

## [1] "no age compositions for the Eastern GOA"

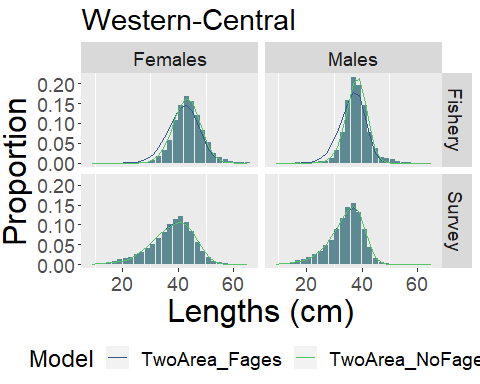


Figure 4. Fits (lines) to female and male fishery length composition with data aggregated by year (shaded regions) for the two-area area model.

## [1] "no age compositions for the Eastern GOA"

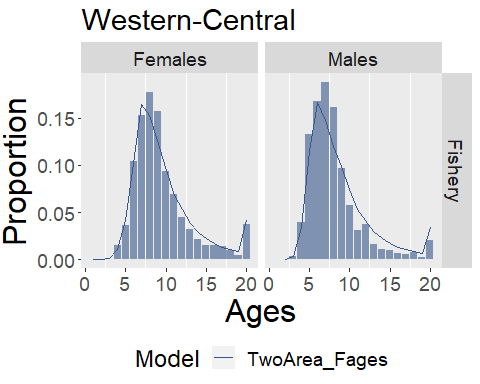


Figure 5. Fits (lines) to female and male fishery age composition with data aggregated by year (shaded regions) for the two-area area model with fishery ages included in model inputs.