

## Mackerel weight and length sampling protocol

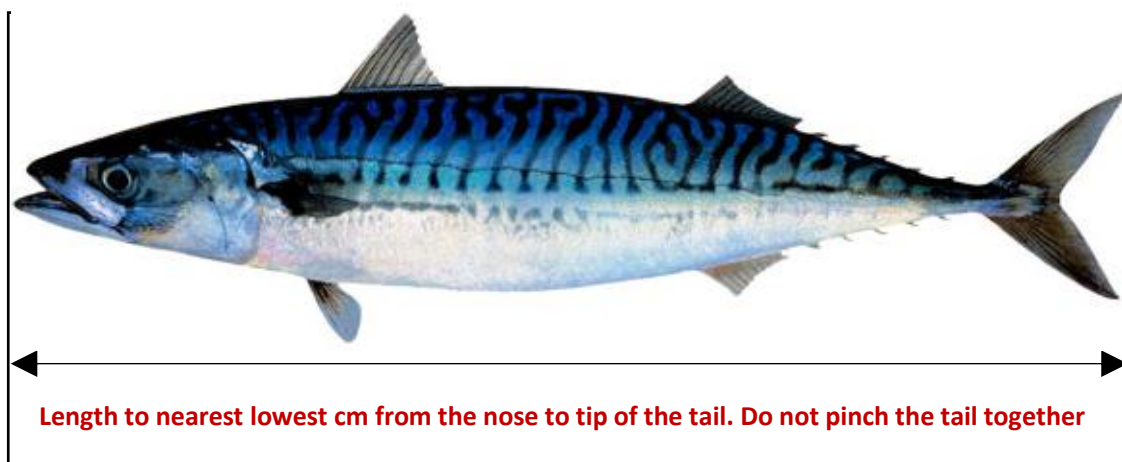
**Why?** Measuring both the weight and length of fish at the same time provides information on their growth that can be used in assessing the state of the stock.

**When?** A sample of weight and length should be taken from every haul, and the details of the haul recorded so that the date and position can be linked to the sample details. A sheet for recording the haul data is provided.

**What?** The sample needs to be representative of overall catch, so the sample needs to be taken at different times during pumping. We will use the start, middle and end.

### How?

1. During pumping, take half a basket of fish at the start, middle and end, and put them to one side until the fishing work is done. The order of the baskets doesn't matter because all the fish will be weighed and measured. The three baskets together should be around 40-45kg.
2. Take each fish and measure its length (see diagram) to the nearest lowest cm (for example, if it is 37.7cm, write down 37 cm. If its 37.4 cm, write down 37), then measure its weight in grams.
3. Record the measurements of all the fish in the basket on the recording sheet provided. Use a separate sheet for each haul.
4. Enter the data from the paper copy into the spreadsheet sent to the skipper. The file is called 'Length-Weight Data Entry sheet\_SPFA.xlsx'



**Mackerel sample:** take 1/2 basket at the start, middle and end of pumping



3 x 1/2 baskets (giving approx. 40-45kg)



For every fish in the basket, measure and record length to lowest cm, then weight in grams

