

National Marine Fisheries Research Institute

Gdynia, Poland

Sampling Scheme - Baltic SPF regional

The sampling scheme aims to collect biological samples of sprat and herring to estimate length-composition, numbers at age, and mean weight at age of commercial catches.

The target population consists of vessels which met the following criteria:

- being active at least once in the period January-December in the previous year,
- using OTM,
- its total landing in the previous year were at least 10t,
- targeting sprat and herring (over 95%)
- have length above 17.5m.

The primary sampling unit applied in the sampling program is the fishing vessel. The list of vessels is used as a proxy to select a trip because the list of trips is not known in advance. In total 80 vessels will be selected for 1 year (30 or 10 per quarter). This vessels' list is a proxy for selecting the PSUs in each quarter. The method of selecting the vessels has been changed since the second quarter of 2025. Before that time, selection method was simple random sampling with replacement. It was decided to change it to simple random sampling without replacement. Changing to the method without replacement will result in greater diversity and representativeness of the samples.

During each sampling quarter, the coordinator calls the contact persons from the selected vessels and asks for a sample to be collected from the next trip.. The coordinator calls the contact person of the selected vessel a maximum of five times a week. The calls are to be made when the weather forecast is good, and when the staff is available to pick up the sample from the harbour. All contacts are recorded including refusals. The vessel which is definitely not willing to cooperate is blacklisted for 1 year.

The sample should be taken from unsorted catch from the first haul. A minimum 5 kg random sample is provided from a trip with information on the given haul from which the sample was taken.

The number of sprat selected for age reading per 0.5-cm length-class should be maximum:

- 5 individuals per length class, if fish length is <10 cm
- 10 individuals per length class, if fish length is ≥ 10 cm.

For the smallest size groups, that presumably contain only one age group, the number of otoliths per length-class may be reduced.

The number of herrings selected for age reading per 0.5-cm length class should be a maximum of 5 individuals per length class. Additionally, information on sex, maturity, stomach fullness, parasites, and external diseases of individuals are collected.