

Frozen sample collection protocol – MACKEREL and HERRING

NOTE: This is a trial to test the sampling procedures and data collected by vessels. It is additional to the usual weight and length sampling, which remains the same as usual.

Why? Collecting frozen samples provides fish for laboratory analysis of additional biological information, including sex, maturity and age (by counting yearly growth rings that are visible on the ear bone). Together with weight and length measurements, the additional information tells us about changes in fish biology, growth and how much biomass of fish there is in each age group of the stock. This detailed set of information (weight, length, sex, maturity and age) is used in stock assessment.

What? The 'sample' is just a factory box of whole fish, frozen and labelled.

How?

- Samples are required from randomly selected trips only. Katie or Steve will contact the vessel (by email or WhatsApp) to request the trip is sampled.
- For every haul during the trip that you are asked to sample:
 - after your regular weight-length sample measuring is done, fill a factory box from a random mixture of the fish you measured.
 - Put one label inside the box and another on the outside, then freeze them.
- Labels are provided (see example):

Pelagic Self-sampling Project (PANDORA)

***** FROZEN FISH SAMPLE *****

Vessel: _____ Species: _____

Haul date: _____ Haul no.: _____

Landing port: _____

Notes: _____

Sample contacts:

- Katie Brigden (NAFC Marine Centre, Shetland)
katie.brigden@uhi.ac.uk 01595 772231 Mon-Fri 9-5
- Liz Clarke (Marine Scotland Science, Aberdeen)
Liz.Clarke@gov.scot

- In the comments section of the Haul and Length-Weight data entry sheets please include the information 'Frozen sample taken'.

Vessel:		HAUL INFORMATION													SPFA SCOTTISH PELAGIC FISHERMEN'S ASSOCIATION	
Year:		Essential information in shaded columns														
TRIP	DATE & TIME	GEAR	HAUL	POSITION			NET		CATCH DATA		ENVIRONMENT			NOTES	Quality control	
Trip No.	Date and Time dd.mm.yy hh:mm	Gear (trawl or seine)	Haul no.	Position (lat)	N-Position S (long)	E-duration W (hrs)	Bottom depth (ftm)	Headline depth (ftm)	Catch weight (t)	av. fish size (g)	Temp (DegC)	Wind dir.	Wind speed (kts)	By-catch species	Entered by (Name)	
trip	datetime	gear	haul	poslat	re-position	ew-duration	depth	headline	catch	gramsize	temphead	windir	windspd	bycatch	Entered_by	

- Frozen samples will be collected during landing (Scotland only) or your return to homeport. (Katie will contact the vessel to arrange).