

## GUIDELINES FOR PELAGIC SAMPLING

The number of samples that are taken per week depends on the fishery and the people in the ports are best to judge this. If the fishery takes place in 1 month or over 3 months and if landings are high or low will determine the number of samples needed per week. The samples should be spread out across the fishing season and across areas.

### **Aged Sampling Targets**

Age targets by division and quarter are given in the table below. These new targets are considerably lower than previous levels. These targets are based on the highest numbers of otoliths required to avoid a precision level greater than 12.5% for a species and quarter. The targets also take into account different areas where it is known that the age distributions are different, within a species. Until now, all MO samples also had an aged component. This will change now, and only a proportion of the MO samples will have an aged component, unless no additional MO is required at all.

The age precision will be reviewed annually and targets revised if required.

### **Obtaining age samples**

**Celtic Sea herring and blue whiting** aged samples will still be collected on a **random** basis.

- Celtic Sea Herring – 50 otoliths per aged sample instead of 75
- Blue Whiting – 100 otoliths

For **the other stocks** the sampling will be on a certain number per length class:

- mackerel and 5 or 10 per length class
- horse mackerel 5 or 10 per length class
- NW herring 5 per length class

The decision on whether to take 5 or 10 depends on the duration of the season. If the sampler knows that the fishery will last a long time then 5 is sufficient. But if the fishery is likely to end quickly, then 10 is a better target.

**Targets for aged sampling with number of additional Measured Only samples that may be required.**

Species	Divisions	Quarter	Target Number of Ages	Number of Aged Samples	Number of Additional Measured Samples	Guidelines for smarter sampling
Herring	VIIb	4	400	8	0	1 sample per week per ground
	VIaS	1	950	19	1	2 sample per week per ground
		4	800	16	4	2 sample per week per ground
	VIaN	1	400	8	0	1 sample per week per ground
		4	400	8	0	1 sample per week per ground
Herring	VIIaS sentinel	4	500	10	0	1 sample per week for each of river and outside
		1	500	10	0	1 sample per week for each of river and outside
Herring	VIIg	3	250	7	0	1-2 sample per week per ground
		4	500	13	0	1-2 sample per week per ground
		1	250	7	0	1-2 sample per week per ground
	VIIj	4	400	8	0	1-2 sample per week per ground
Sprat	All	All	0	20 (weightonly)	20	1 sample per week per ground
Mackerel	IV,VI	3 and 4	1200	20	0	2 sample per week per ground for each fleet segment
		1	500	9	9	2 sample per week per ground for each fleet segment
	VIIb-k	1	500	9	9	2 sample per week per ground for each fleet segment
Scad	VI	1	1540	19	0	2 sample per week per ground for each fleet segment, 80 otoliths/sample
	VI	3	100	2	0	2 sample per week per ground for each fleet segment
	VI	4	400	8	9	2 sample per week per ground for each fleet segment 60 otoliths/sample
	VII	1	1520	19	0	2 sample per week per ground for each fleet segment; 80 otoliths/sample
	VII	3	100	2	0	2 sample per week per ground for each fleet segment
	VII	4	100	2	9	2 sample per week per ground for each fleet segment
Blue whiting	All	1	1400	14	0	2 sample per week per ground
Albacore tuna	VII/VIII	3 and 4	0	0	20	2 sample per week per ground

### **Measured Only (MO) Sampling**

When the aged target is met and additional measured only samples are needed, a random sample around the same size as an aged sample is required.

It is important to achieve **smarter sampling** within these targets. Some guidelines for smarter sampling are given below:

Only one sample should be taken from the landing of a pair team

- No need to sample excessively from the same ground and type of boat within the same week
- Try not to sample from the same boat/boats all the time.

Attention should be paid to the ground being fished. In the case of mackerel the grounds may be e.g. “St. Kilda”, “Shetland” etc. For herring it could be “Waterford Harbour,” “Tramore” or “Tory Bank” etc, whilst for blue whiting it could be “Porcupine”. Guidelines for sampling the various species are given in the table.

### **Pelagic and Demersal Sampling**

In order to ensure that demersal sampling targets are met and to secure the future of the DCF it is necessary for demersal and pelagic sampling to be coordinated. The exact nature of this coordination varies from coast to coast.

#### Northwest

During quarter 4 and quarter 1 pelagic sampling in Killybegs has a high priority. However from time to time a team of samplers will go to Greencastle for demersal sampling. As far as possible this work should be shared between Galway and Killybegs staff. However the Galway staff should also assist with any backlog that develops in Killybegs whilst sampling is taking place in Greencastle. In Q2 and Q3 the main work in Killybegs is ageing and entering data. Staff in Killybegs will assist with demersal sampling in Greencastle and Galway based staff will assist with data input in Killybegs on a reciprocal basis.

#### West

Teams from Galway will regularly visit Rossaveal for pelagic and demersal sampling. Particular attention for pelagic sampling is needed in quarter 4 (VIIb herring) and quarter 1 and 2 (west coast mackerel).

#### South

Unlike Killybegs, sampling staff on the south coast witness a mixture of pelagic and demersal landings. Therefore it is important to get the balance right in Dunmore East and Castletownbere, which are pressure points. The guidelines for smarter pelagic measured only sampling should be helpful here.

#### East

The only pelagic landings in the east coast are when there is a VIIa herring fishery. This has not taken place in the most recent years, but usually occurs in Q3.