



POINT FORTIN CORPORATION

CARIBBEAN FISHERIES TRAINING AND DEVELOPMENT INSTITUTE GUIDELINES TO FRESH AND STALE FISH

Any one of the conditions enumerated may be accepted as a possible indication that decomposition has commenced but each case must be judged on its merit.

ODOUR

Fresh Fish: Odour may vary somewhat in different species but in general it is fresh and not unpleasant.

Stale Fish: The odour from a stale fish may vary from a slightly unpleasant smell to one of nauseating putrefaction. But, in general, a distinctly sour odour or the offensive odour of decomposition is usually present in stale fish. It may be said that such odours invariably indicate staleness.

EYES

Fresh Fish: Full, bright and perfectly fresh in appearance. Pupil jet black and convex. Cornea transparent.

Stale Fish: Eyes sunken or completely shrunken. Covered with slight to thick slime, often yellowish in colour. The pupil sinks and loses its blackness as staleness advances and the milky white pupils is generally a sign of staleness of such an extent as to involve immediate condemnation.

GILLS

Fresh Fish: Brightly coloured, clean, free from slime and offensive odour.

Stale Fish: Discoloured, usually dark brown, slime present, dirty appearance.

FLESH

Fresh Fish: Firm and elastic to the touch. White or bluish-white and translucent. No discoloration. Adheres firmly to the bone and difficult to tear. Blood under tissue sound red in colour.

Stale Fish: Soft and limp. Flabby and pits on pressure. Reddening along the backbone. Easily tears from bone. Blood under tissue sound brown or chocolate coloured.

GENERAL APPEARANCE

Fresh Fish: Clean bright appearance, smooth and glistening. Moist with a transparent slime. No discoloration.

Stale Fish: Stale, tired and lifeless in appearance. Dry and possibly rough to the touch, with a gritty feeling which is characteristic of staleness. Slight to severe bleaching. Scales easily rubbed off. Varying degree of brown, red or bluish discoloration of the abdominal walls.

These remarks apply to fish in general, but it must be remembered that certain species exhibit characteristic signs of staleness such as the ammonia smell of stale Shark.

In practical fish inspection, the three guiding principles are as follows:

1. Visual Examination

A very brief examination will enable the inspector to decide if the necessity for a more detailed examination is indicated. A really fresh fish is obviously such, while a really stale fish is equally simple to discern. It is the stages between original freshness and putrescence or decay which render a close examination necessary and provide the inspector with all of his problems. The appearance of the outer surfaces is noted, the belly cavity examined for discoloration, the lining being rubbed off to facilitate examination of the flesh. Generally, the indications of staleness already outlined are looked for by the inspector.

2. Physical Examination

This method of examination is almost as important as the visual examination, as the feel of the fish often indicates staleness, although the fish may appear to be reasonably fresh. The sandpaper feel of stale fish is well known to the experienced inspector and consists of a feeling of grittiness on the surface of the fish, a feeling which is immediately discernible to the finger tips. Lack of moisture on the surface and lack of firmness and elasticity in the flesh are readily revealed by palpation and in the case of a stale fish, it will be found that the belly flaps can easily be torn back if it is thought desirable to examine the flesh near the backbone.

3. Smell

The term is self-explanatory. A fresh fish gives off a fresh and agreeable smell, while the odours from a stale fish are objectionable. A fish may be stale to a degree justifying condemnation without the odour being one of putrefaction, a sour odour frequently being the only smell discernible in such fish.

FLATFISH

In flatfish, loss of firmness is a characteristic sign of staleness. The fresh fish is firm and hard but becomes progressively limper as staleness advances. The discoloration on the underside of the fish becomes more pronounced and the odour from the belly cavity decidedly objectionable. Stale flatfish look what they are, stale, limp, lifeless and dirty. Discoloration of the belly cavity and surrounding flesh is almost invariably present and this is probably due to the comparative difficulty of cleansing the belly cavity of this type of fish when gutting.

FILLETS

As a fillet becomes stale it loses its translucent whiteness and progresses to a creamy colour. The flesh is moist, flabby and ragged and an objectionable odour may be noted on breaking or cutting into the flesh.

SMOKE-CURED FISH

The inspection of this type of fish presents no outstanding difficulties. As cured fish becomes stale, it loses its original crisp dryness, the surface becomes wet and sticky and the flesh progressively limper and flabby. Discoloration of the belly flaps is also indicative of staleness.

It must be strongly emphasized that staleness in smoke-cured fish is not necessarily accompanied by the objectionable smell which is almost invariably associated with stale wet fish. The not unpleasant smell of smoke is characteristic of fish cured by this method and is usually sufficiently strong to cloak the evidence of staleness in so far as smell is concerned.

FROZEN FISH

As far as the actual inspection of frozen fish is concerned, it may be noted that a first class quality frozen fish or fillet will retain its pleasing appearance after being thawed out. As quality deteriorates, so does the appearance and texture of the fish. In a poor quality fillet, the flesh is soft, wet and ragged. The clean, wholesome look of the fresh fillet is replaced by a dull, creamy or yellowish appearance. Comparison of a good quality fillet with one of very poor quality will serve to illustrate these points.