Scottish Shellfish
Marketing Group

Mussel Health & Welfare Policy

Introduction:
Stress can be defined as any factor (either external or internal) causing a physiological disturbance to the mussels. In the live mussel industry these factors include capture, de-clumping, fluctuating temperatures, prolonged exposure to wind or draughts, handling and physical damage.
Mussels are generally able to recover from such stresses, however if any or a combination of those stresses are sufficiently intense, then poor quality (broken shells, gaping, unpleasant smell) or dead mussels will result.
Therefore, it is our aim to ensure that the rearing, handling, transportation and processing must be carried out under conditions of minimum stress, with minimal environmental impact and with full regard to animal welfare.

To achieve this, we ensure that:

1. **During cultivation:**
   - All mussels are cultivated on long lines and are continuously submerged to avoid unnecessary stress caused by the local tidal range.
   - All lines are raised off the seabed to ensure that any predation by starfish, dog whelks and shore crabs are minimised or eliminated.
   - Eider ducks, where practical, may be humanely discouraged but, due to their numbers, are generally ignored and simply recorded when sighted.

2. **During harvesting**:
   - All equipment used is manufactured for the live mussel industry and specifically designed to reduce the stress caused to the mussels to a minimum. Drops should be kept to a minimum or cushioned if practical, mechanical de-clumping should be the minimal required to singulate mussels and adequate water should be used to clean mussels.
   - Once removed from the ropes and graded, mussels are placed in Bulk bags/containers. These are designed to have a limited surface area of mussels in direct contact with the air and are constructed of materials that will shelter mussels from the wind/draughts to prevent dehydration.
   - The bulk bags/containers are moved via an onboard crane, these are handled carefully and where possible movements should be minimal and when bags are set down they are done so with minimal force to reduce mussel stress. Ideally a sling should be used to spread the top of the bag during lifting to avoid the squashing of mussels at the top of the bag.

3. **During storage and transportation:**
   - The bulk bags/containers are loaded onto pallets which reduces the stress caused by continually lifting the entire bulk bag/container during the transportation chain.
   - Ice is added to each bag, on top of the mussels. Thus, reducing any unnecessary fluctuations in temperature and helping to prevent dehydration.
   - Refrigerated transport is used for any transport over 2 hours, again to avoid any unnecessary fluctuations in temperature.
   - Mussels should, where possible, be harvested and transported to processing facilities on the same day.
   - Transportation times are kept to a minimum, generally within 24 hours.

4. **At arrival at the processing facility:**
    - Every batch has an intake assessment carried out where a sample is taken from across several bags and assessed for damage (cracked and broken shells, dead etc.). This assessment is communicated to the farm. Therefore, any issues that may have occurred during harvesting and transportation can be assessed and corrective actions taken for future batches, if required.

Note: It is in our best interest to ensure that the rearing, handling and transportation of live mussels is carried out with minimal stress caused to the animal as this has a direct financial impact and impacts customer experience.