Gene Editing Working Group

28th March 2024, 9.30am on MS Teams

Attendees:

Madeleine Campbell, Chair Rose Jackson, BCVA Dominic Wells, Professor of Translational Medicine, RVC Emily Craven, EWAP Justine Shotton, Past President Polly Compston, BVA Policy Committee Fritha Langford, BVA EWAP

BVA:

Anna Judson BVA JVP Ali Ramsay Head of Policy and Public Affairs Hannah Killeen Policy and Public Affairs Officer Charlotte Austen-Hardy Media Officer

Guests: Dr Ross Houston, Director Genetics and Innovation, Benchmark Genetics Chris Stockdale, Head of Genetic Technology Policy, FSA

Apologies:

Richard Piercy, Professor of Comparative Neuromuscular Disease, RVC Amelia Findon Director of Policy and Governance Charlotte Commins BVPA

Minutes and Matters Arising

1. The minutes of the January meeting were agreed without amendment.

Gene Editing in Fish

- 2. Dr Ross Houston spoke about his work on selective breeding of salmon and how gene editing could be used to enhance this work, and what the risks would be around doing so. full presentation has been shared separately with the group, but in summary selective breeding is currently used largely for increasing growth, and preventing disease. Breeding programmes have to be balanced across various traits, but strains can be selected for certain factors.
- 3. Gene editing has the potential to speed up development of a trait, rather than incremental improvements each generation, and to increase the number of traits that can be targeted, However, it should be used to supplement a well-managed breeding programme, not as a replacement.
- 4. There is a risk of gene edited fish escaping and breeding with the wild population. To control this, the gene edited fish would be kept in a development facility, with only the eggs sold commercially (which is how selected strains are sold now). The commercial fish would then be sterile, which is also an advantage, for salmon in particular, as mature fish provide a lower quality product. This means regulation would apply to the development facilities, rather than fish farms. Shrimp would be an exception to this, as they are sold as live breeding stock.