ABSTRACTS * Author Presenting Paper

18 A futuristic look at the dairy cattle genetics industry. R. D. Welper*, *Alta Genetics Inc.*.

The structure of the dairy cattle genetics industry has changed over the last decade, as bull numbers have declined and mergers have significantly decreased the number of breeding companies. Mergers and alliances will continue over the next few decades, as low blend prices and increasing global competition will force decreased costs and increased efficiencies in the dairy cattle genetics industry. Dairy cattle semen has become a commodity with the value set by genetic evaluations done by third party organizations. Sharing of superior genetic lines has been the trademark of the dairy cattle genetics industry that has set it apart from other genetics industries. The major challenge for the remaining breeding companies will be to modify current practices in order to differentiate their product lines. This will require non-traditional thinking and novel methods of utilizing new and existing technologies. The next step will be to tailor genetic selection programs to meet the specific needs of consumers and milk processors. Technologies such as nucleus herds, semen sexing, progeny test schemes, genomics, and cloning are not new to this industry, as the initial research on these projects was done decades ago. Application and refinement of these and other technologies on a large scale, however, will be the main focus of the dairy cattle genetics industry over the next few decades. Genetic selection strategies may focus more on fitness traits, allelic frequencies, crossbreeding, and bio-security. Data, genetic evaluations, and genetic lines may become proprietary in order to increase differentiation and create unique product lines, as is currently done in the swine, poultry, and plant breeding industries.

Key Words: Breeding, Dairy cattle, Genetic evaluations