

## The Future Cow

TASC talk by Dr Duncan Pullar – 18/02/2016



Once upon a time, all you needed were some magic beans which you could swap, with some poor sucker, for a cow at the local market and some grass for you to have a fresh supply of milk every day and in a few years a well-stocked larder.

Well today things aren't that simple, for a farmer to make a living from his cows he needs a little help from science and technology.

Dr Duncan Pullar who is a director at DairyCo, a division of the Agriculture and Horticulture Development Board, gave members of The

Adstock Science Club a fascinating insight into what it takes to put a tasty beef steak on your plate.

Man has, for millennia, used selective breeding methods to fashion animal and plants to meet their needs, whims and fashions. I'm sure most people are aware that dogs, for instance, are closely related to the wolf family and over time have evolved, with the help of selective breeding, into the vast varieties we currently see. Since the time of the hunter-gatherer dogs have been "man's best friend". Similarly, cows have been selectively bred for man's changing needs, however the way this is done has altered dramatically over the last few years. Computers and genomics are now being utilised to modify herds in a more precise and controlled way than has ever been done in the past.

The collection of data on each cow, going back as far as possible, allows farmers to mix and match their herd with other breeds to produce stock with characteristics best suited for their environment and the markets they hope to sell into.

Dr Pullar went on to show how values can be assigned to different breeds and the way computers are used to draw up breeding plans along with feed and management strategies.



All in all today's livestock farming is vastly different from that of fifty or so years ago and offers the farmer a better way to utilise his farm and animals more efficiently, and hopefully to earn enough to prosper.

Marius Stuart