Issue Card B01

What changes have modern livestock methods made?

Over 40 years milk production per cow has more than doubled by a combination of breeding selection, better nutrition, improved veterinary care and wiser decisions in managing the livestock.

BovReg: Breeding

Issue Card B02

How important is reducing methane from cows?

One way to reduce methane emissions is simply to breed beef cattle to grow faster, so less methane is produced to gain each kilogram of beef, but does more intensive production compromise other environmental goals?

BovReg: Breeding

Issue Card B03

Don't adapt animals to intensive systems; change the system

Some think we shouldn't breed cattle to make them more suited to intensive factory-type systems. We should remake the systems with better animal welfare, even if it meant less efficiency.

BovReg: Breeding

Issue Card B04

What are side effects of selecting for higher yields?

Over-selection for increased milk yield means high-yielding dairy cows have short lives, because they became chronically lame or infertile. For some years, breeding goals are seeking a better balance of factors that mean longer productive lives.

BovReg: Breeding

Issue Card B05

Balancing traits - which are the most important?

Animal breeding usually involves making trade-offs among a set of desired traits, like production efficiency, fertility, welfare, emissions. Each one is given a weighting. Which traits do we think are the most important?

BovReg: Breeding

Issue Card B06

How far should we select cattle to human ends?

Technologies are being introduced that make cattle management easier, like robotic milking or electronic calving sensors. Should we breed cows out of the herd that adapt less well to the new systems, or is this going too far?
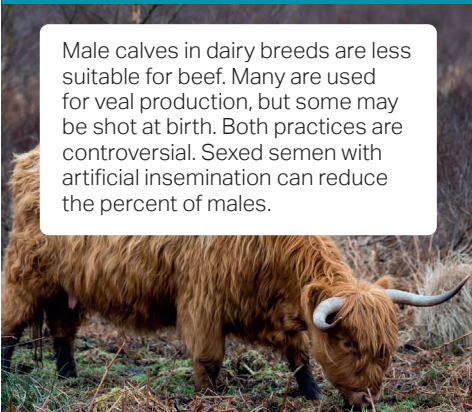
BovReg: Production

Issue Card B07

What should we do with male dairy calves?

Male calves in dairy breeds are less suitable for beef. Many are used for veal production, but some may be shot at birth. Both practices are controversial. Sexed semen with artificial insemination can reduce the percent of males.

BovReg: Production

Issue Card B08

Circular agriculture: recycling food waste with cattle

To create a more circular way of agriculture, some advocate that cattle should use up waste human food and graze areas unsuited to crop production, and to breed cattle especially suited for such systems.

BovReg: Production

Issue Card B09

Intensive and extensive good or bad?

Some believe intensive animal agricultural systems are too industrial and inhumane, preferring extensive approaches. Others say intensive systems use resources more efficiently, produce less methane, and if well managed can have good animal welfare.

BovReg: Production

Issue Card B10

Are there alternatives to globally dominant breeds?

Global pressure for production favours certain highly productive breeds like Holstein-Friesian dairy cows or Charolais beef. How much should we develop local breeds (e.g. Highland or Montbéliarde) that have other advantages but have difficulty competing?

BovReg: Production

Issue Card B11

Can we balance milk yield and animal health?

Some say that cows shouldn't be selected for increased milk yield any further because they tend to get mastitis more easily. Others say this problem is being addressed by more sophisticated breeding.

BovReg: Welfare & Health

Issue Card B12

Some animal diseases occur regardless of systems

Extensive cattle production has no guarantee that diseases will not break out. Conditions like Foot and Mouth Disease can occur on all types of farms. But having animals closer together increases the chance of disease spreading.

BovReg: Welfare & Health

Issue Card B13

Good aims can still be used for bad ends

Selecting animals to be more disease resistant should not be an excuse for keeping animals in poor or overcrowded conditions.
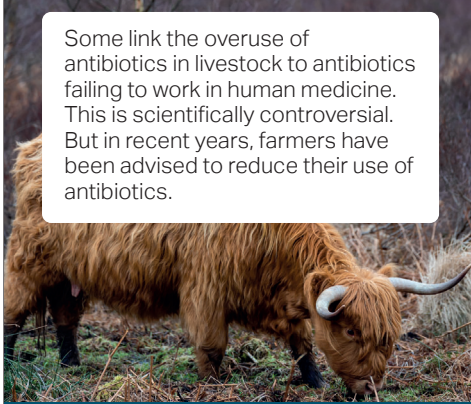
BovReg: Welfare & Health

Issue Card B14

Is anti-microbial use in animals linked to AMR in medicine?

Some link the overuse of antibiotics in livestock to antibiotics failing to work in human medicine. This is scientifically controversial. But in recent years, farmers have been advised to reduce their use of antibiotics.

BovReg: Welfare & Health

Issue Card B15

Selecting animals for disease resistance

Selecting cattle for better resistance to certain diseases would be an obvious animal welfare benefit and would also reduce the need to use antibiotics to treat sick animals.
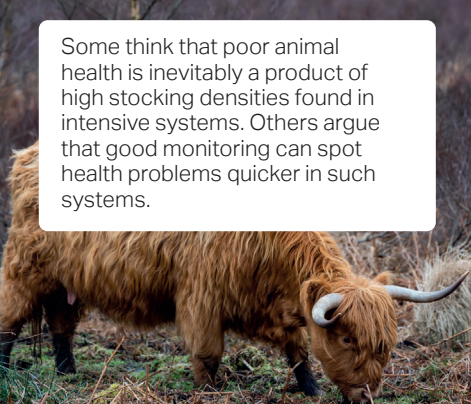
BovReg: Welfare & Health

Issue Card B16

Is animal health better or worse in intensive systems?

Some think that poor animal health is inevitably a product of high stocking densities found in intensive systems. Others argue that good monitoring can spot health problems quicker in such systems.

BovReg: Welfare & Health

Issue Card B17

Using land for food crops or animal feed?

In some regions, growing crops for animal grazing or growing animal feed is in direct competition for growing food on the land. But in many upland or wet regions, land may be suitable for cattle but not for crops.

BovReg: Land Use & Biodiversity

Issue Card B18

Local breeds are important for genetic diversity

Maintaining minority local breeds helps to keep genetic diversity in cattle that might be important in future.

BovReg: Land Use & Biodiversity

Issue Card B19

Social importance of livestock in remote regions

Farming cattle is important in rural, mountain and island communities where there are few alternatives for employment, and cultures are based around sustaining the land for cattle.

BovReg: Land Use & Biodiversity

Issue Card B20

Selecting cattle for a warmer global climate

Rather than simply going for more efficiency, should we put more emphasis on selecting cattle to be tolerant to impacts of climate change, e.g. selecting cattle for hotter climates, feed not edible for humans, or for land under drought?

BovReg: Climate Change

Issue Card B21

Is reducing cattle methane emissions top priority?

Some believe that our primary focus should now be selection for reduced methane emissions from livestock. But what if this meant less productive animals and more expensive food?

BovReg: Climate Change

Issue Card B22

Reducing methane by faster growth or longer on pasture?

Fast growth or higher milk yield produced using genetics and supplemented feeding reduces how long animals produce methane. Grass-fed systems can absorb carbon to compensate for livestock emissions, but cattle have to live longer to get high yields.
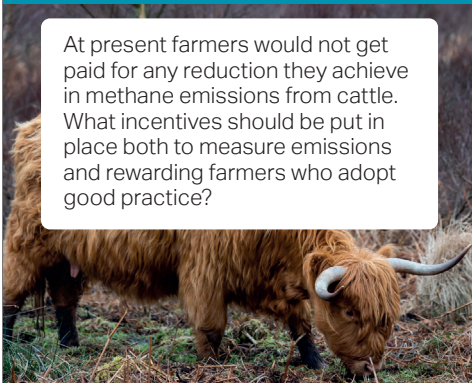
BovReg: Climate Change

Issue Card B23

Making reducing cattle methane emissions worthwhile for the farmer

At present farmers would not get paid for any reduction they achieve in methane emissions from cattle. What incentives should be put in place both to measure emissions and rewarding farmers who adopt good practice?
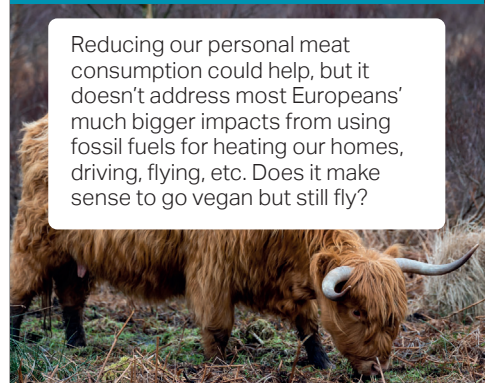
BovReg: Climate Change

Issue Card B24

How much would eating less meat help combat climate change?

Reducing our personal meat consumption could help, but it doesn't address most Europeans' much bigger impacts from using fossil fuels for heating our homes, driving, flying, etc. Does it make sense to go vegan but still fly?
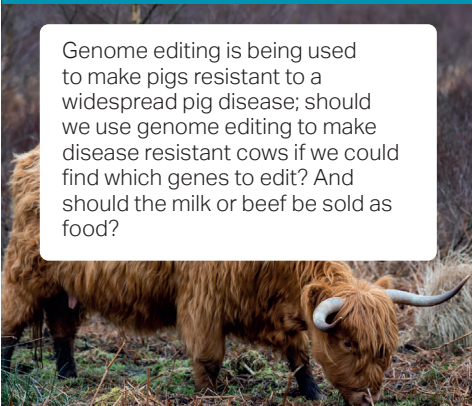
BovReg: Climate Change

Issue Card B25

Should we genome edit cattle for disease resistance?

Genome editing is being used to make pigs resistant to a widespread pig disease; should we use genome editing to make disease resistant cows if we could find which genes to edit? And should the milk or beef be sold as food?
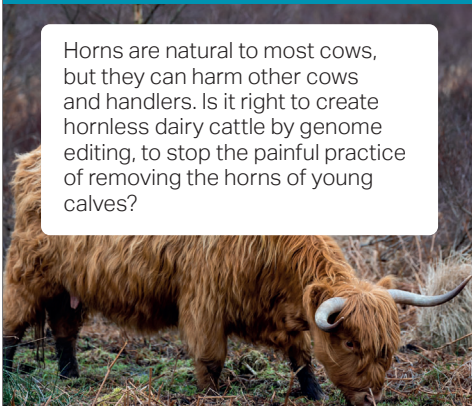
BovReg: Genome Editing

Issue Card B26

Is it right to create hornless dairy cattle by genome editing?

Horns are natural to most cows, but they can harm other cows and handlers. Is it right to create hornless dairy cattle by genome editing, to stop the painful practice of removing the horns of young calves?

BovReg: Genome Editing

Issue Card B27

Reducing cattle disease: genome editing or farm less intensively?

Some say we should focus on less intensive animal production to reduce the spread of animal disease rather than technical fixes. Others say if we could use genome editing to make animals resistant, we should do it.

BovReg: Genome Editing

Issue Card B28

Slow selective breeding or fast genome editing?

Breeding a desired genetic change into a cattle herd can take many years. If genome editing could make that change quickly, is it the logical next step in breeding? Or would it cross an ethical line - if so why?

BovReg: Genome Editing

Issue Card B29

Why vegetarians believe we shouldn't eat meat

Some simply believe humans shouldn't kill animals to eat them. Others consider that meat or that diets are healthier, or livestock production causes too much harm to animals, environmental pollution and carbon emissions, or takes land from growing crops.

BovReg: Food

Issue Card B30

Should we eat less meat to help combat climate change?

Many advocate reducing red meat consumption in Western diets to reduce methane emissions from cows and sheep. Should we do so? If we did reduce, how much - just a little, mostly, or completely?

BovReg: Food

Issue Card B31

Why should we eat meat?

Some say that a healthy diet should avoid meat; others argue that a certain amount of meat can make a valuable contribution to human nutrition. Cattle can convert grass to food that humans can eat.

BovReg: Food

Issue Card B32

Challenging 'high tech' approaches to breeding

Some say we should not be applying modern technology methods to animal breeding, like scientific and genetic analysis, biological markers, tags etc.; if we breed animals it should be 'naturally' done, relying on observable characteristics.

BovReg: Naturalness

Issue Card B33

What does living in harmony with nature mean?

People talk about 'living in harmony with nature', but what does it actually mean ... when human civilisation has profoundly changed livestock, crops, landscapes and land use over millennia?

BovReg: Naturalness

Issue Card B34

Designer cattle?

Are we going too far trying to make 'perfect' cows according to our human criteria in order to match what farmers, consumers, retailers expect - given that animals are living beings, not just assembly line components?

BovReg: Naturalness

Issue Card B35

Being selective about information to suit one's cause

When groups campaign about controversial public issues like animal production or meat eating, the primary aim is often plausibility rather than truth. How trustworthy are our sources of information?
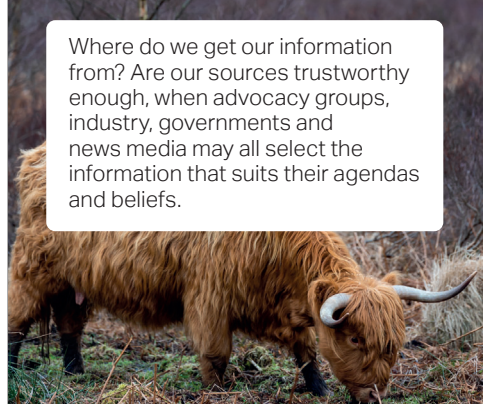
BovReg: Societal & Information

Issue Card B36

How trustworthy is our information?

Where do we get our information from? Are our sources trustworthy enough, when advocacy groups, industry, governments and news media may all select the information that suits their agendas and beliefs.

BovReg: Societal & Information

Issue Card B37

Who benefits from greener cattle?

If environmental improvements to cattle mean that beef or milk costs more, would you be willing to pay extra? Would it make a difference if the farmer gets the benefit or the retailer?

BovReg: Societal & Information

Issue Card B38

Humans breed animals for different reasons

Humans have bred animals since ancient times for many purposes: food animals like cattle and pigs, pets, racehorses, etc. Over time great changes can be made, e.g. different breeds of dogs. How much should we change cattle?
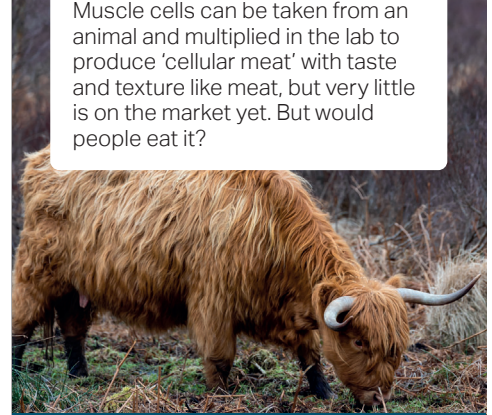
BovReg: Breeding

Issue Card B39

Meat without animals?

Muscle cells can be taken from an animal and multiplied in the lab to produce 'cellular meat' with taste and texture like meat, but very little is on the market yet. But would people eat it?

BovReg: Food

Issue Card B40

Livestock and the environment

Some argue that too much land is being used for livestock; we should use it for planting trees or 'rewilding' the land. Others argue that a mixture of livestock and crops gives an optimum environment.

BovReg: Land Use & Biodiversity