



## School Factsheet

### Cattle and Ancient History

- In Egypt the cow was sacred to the God Isis. Decorated cattle were a popular present.
- Civilisations like the Hindus, Greeks, Egyptians, Romans and Hebrews used their cattle for parades or ancient 'Gala Days'. For these occasions the cattle were festooned with wreaths and garlands. Cattle were also used as draught animals for pulling carts and ploughs
- Several ancient civilisations had a big focus on the welfare of cattle - The Hindus, Hebrews and Romans are examples. This led to guidelines like animal welfare standards today - for example -

*"Thou shalt not muzzle the Ox when he treadeth out the corn."*

And from the Romans -

*"The length of a furrow shall not exceed 120 paces, or else that oxen shall have time for breath."*

The ploughman is required to *"shift the yoke that their backs not be galled"* and *"moisten their mouths with water"*

- The Roman word for money - *pecunia* - comes from *pecus* - cattle
- There are ancient references to cattle being used in the Celtic world 2,000 years ago as a form of currency, including paying fines.

## Cattle in the North West

The north west parishes boast some of the most important quality environments and landscapes in Europe. For well over 5,000 years cattle have been an indigenous part of these special habitats. Today's cattle descend from the wild cattle or Aurochs. Domestication began in the Middle East about 10,000 years ago and in Europe about 2,000 years ago. The last European *wild Auroch* died in Poland in 1627. This history shows that cattle are a natural part of our local ecosystems and very important to Highland history.

## Cattle in Gaidhealtachd Culture

The *Carmina Gadelica* or *Ortha nan Gaidheal* is a famous collection of ancient and traditional Gaelic sayings, songs and prayers collected by Alexander Carmichael in the late 19<sup>th</sup> century. There are five volumes in this collection. The books include many blessings and sayings about cattle and plants found locally. The huge amount of sayings and songs illustrates how central cattle were in the past to Gaidhealtachd life and work. It was traditional to repeat sayings when going about work on the croft or in the home. Many blessings and prayers refer to *Chaluim Chille* - St Columba or Columba of the Church- and ask him to protect the cattle.

### *Buachailleachd Chaluim Chille*

Buachailleachd Chaluim Chille  
Dha bhur cuartach a' falbh 's a' tilleadh,  
Dha bhur cuartach an srath 's an iomair  
Agus iomall gach garbhlaich;

Dha bhur cumail a shloc 's o eabar,  
Dha bhur cumail o chnoc 's o chreaga,  
Dha bhur cumail o loch 's o leagadh,  
Gach feasgar agus anmoch;

Dha bhur cumail o'n mhoisein mhillte,  
Dha bhur cumail o'n chroisein chrìona,  
Dha bhur cumail o'n roisean rionga  
Is o na sìodhaich chearbach.

Sìth Chaluim dhuidh san ionailt,  
Sìth Bhrìghde dhuibh san ionailt,  
Sìth Mhoire dhuibh san ionailt,  
'S bhur tilleadh dachaidh anaglainn.

### *Columba's Herding*

May the herding of Columba  
Encompass you going and returning,  
Encompass you in strath and on ridge  
And on the edge of each rough region;

May it keep you from pit and from mire,  
Keep you from hill and from crag,  
Keep you from loch and from downfall,  
Each evening and each darkling;

May it keep you from mean destroyer,  
Keep you from the mischievous niggard'  
Keep you from mishap of bar-stumbling  
And from the untoward fays.

The peace of Columba be yours in the grazing,  
The peace of Brigit be yours in the grazing,  
The peace of Mary be yours in the grazing,  
And may you return home safe-guarded.

## Why Does a Mixture of Grazing Animals Matter?

Cattle are less selective grazers than sheep, deer and goats and can graze poorer quality ground. They need a longer sward height than sheep and improve the inbye and outrun for other grazers by taking rougher, tussocky vegetation. When only deer or sheep are present this rougher, tussocky vegetation thrives and chokes out more nutritious grasses and plants. Since cattle leave a longer 'sward' (grass and other vegetation) they maintain a greater biomass than sheep alone - this benefits insects and birds.

Through trampling, grazing, dunging and hefting cattle provide great benefits for the ground, grazings and wildlife. Cattle are good for birdlife, plants and flowers. Cattle enrich the pasture and restore trace elements in the grazing for use by other grazers. This is good for animal health.

### *How Do You Compare Different Kinds of Grazings Animals?*

The term 'Livestock Unit' is used to measure stocking density when different kinds of animals are grazing on one field or hill. Each type of animal is allocated a number according to that animal's comparative grazing needs. By counting the animals on a piece of ground and adding up the numbers you can calculate the grazing density. By using 'Livestock Units' you can then compare different kinds of animals. The total number of Hectares divided by the total Livestock Units equals the Stocking Density.

<b>Grazer</b>	<b>Suckler Cow</b>	<b>Ewe</b>	<b>Deer</b>	<b>Rabbit</b>
<b><i>Livestock Unit (LU)</i></b>	1.0	0.1	0.3	0.01

### *Herd Animals and Hefting*

Since cattle are herd animals on large areas of ground they will soon cover great distances and even in smaller parks they will learn to make best use of the available grazings and shelter. A mixture of grazing animals which includes a good proportion of cattle enhances the trace elements and nutrient values of pasture which in turn benefits sheep and reduces the cost of feed, dose etc.

The herd 'hefts' to a particular area of ground. By hefting the animals make the best of the ground in any weather, stay within particular haunts in particular weather conditions and at particular times of year according to vegetation cycles and keep deer out of the hefted area. As sheep and cattle are removed from hill ground, deer move into the heft. Putting cattle back on hill ground pushes back the deer and establishes a more balanced and diverse grazings pattern.

### ***Trampling***

Cattle venture into a variety of types of ground and can hence break up old plant litter, rough areas, bracken and rushes. Their trampling creates a mosaic of different lengths of vegetation cover combined with bare patches which lets in heat and light and helps insects and insect eating birds. This trampling also pushes seeds into the ground and encourages annual plants to grow by creating bare patches of ground. Too many cattle or cattle congregating for feeding at one point in the winter can create too much trampling leading to 'poaching'. Damage caused by this is more likely in winter on wet ground, on Flows or Blanket bog and if cattle are always fed in the same place. Given a choice of range cattle will tend to avoid deep peat and flows because the grazing is better on other types of ground.

### ***Dunging***

Cattle dung provides a good place for a variety of insects to lay eggs. These eggs and larvae attract other insects and birds, bats, shrews, moles and badgers. One cow produces about 4 tons of dung a year and that dung in turn produces an annual insect population equivalent to a quarter of the cow's weight.

Dung contains lots of undigested seeds and vegetation which provides good feeding for small birds and helps to regenerate plants. The dung itself fertilises the ground with humus and nutrients which increases worm activity. The increased fertility in places where cattle congregate - watering places or shelters - can change the vegetation which is not always a good thing and vegetation can be killed by dung pats allowing vigorous weeds to invade rapidly. Rotating grazings reduces this type of negative impact and dung from these intensely used corners can be used for the tatties or other crops.

### ***WinterFeed***

One of the benefits associated with cattle production is the growing of winter feed. Just as a small shelter belt can bring back a whole range of birds and plants, growing winter feed encourages an exciting range of birds which have reduced or disappeared in some places. Hay and silage provide cover, feeding and nesting grounds for birds like the corncrake as well as seed and insect eating birds. Land ploughed for turnips or corn provides bare soil where small birds like twite, sky larks and yellow hammer can find seeds and insects. The greatest environmental benefits come from cultivation of a variety of small areas of different winter feed - hay, turnips, corn - since this provides a jigsaw of different micro-habitats. Leaving some areas of inbye free of grazing between May and September allows flowers to mature and set seed. In some townships there is no ground suitable for growing winter feed.

## Change in Cattle Numbers in North West Parishes:

YEAR	Cattle	Cattle:Sheep Ratio
1911	9344	1:17
1947	5622	1:30
2001	2228	1:46

**Cattle and Sheep Numbers** - According to statistics provided by the *Scottish Executive Environment and Rural Affairs Department* there were a total of 113 cattle keepers in the north west parishes in 2001:

Cattle & Sheep 2001	ASSYNT		EDRACHILLES		DURNESS		TONGUE		FARR	
	Units	No.	Units	No.	Units	No.	Units	No.	Units	No.
Total Cattle	20	221	13	154	*	*	28	529	48	1,244
Total Sheep	89	11,265	53	12,757	28	16,546	66	15,613	128	46,313

## What Area The Main Problems Facing Cattle Keepers in the North West?

- The key problem is high costs and low returns.
- Lack of Suckler Cow Premium quota prevents the increase of cattle numbers in the north west. It is estimated that among current producers there is a shortfall of 300 Suckler Cow Premium Quota Units. By 2005 quota will be abolished due to CAP Reform.
- Feed costs are high due to the cost of transporting feed into the area, often in small lots. Local production of winter feed is also costly due to the cost of equipment and loss of earnings for part-time producers.
- Access to bulls is a major problem and bull sharing has declined. Many areas no longer have bull parks.
- Start-up costs for cattle are very high and production is necessarily small scale which makes it difficult for producers to reach a scale which is adequately profitable.
- Much hill ground which could be used for cattle is not stock proof. The cost of fencing and dyke repair is very high. Solving this problem would increase the benefits of cattle on hill ground and free up inbye ground for winter feed production.

## What Has Caused So Many People to Stop Keeping Cattle?

In the past most people kept a house cow for milk, butter and crowdie. Today crofters and local farmers keep cattle for different reasons. For instance they are good for the ground which benefits the sheep and wildlife too. With good management cattle can make a profit. Despite the benefits the number of cattle have still fallen. Why is that? The table below shows the reasons given by people who stopped keeping cattle:

Item	Rank
Lack of help - too tie-ing	1
Too labour intensive	2
Retirement	2
Cost of feed	2
Conflicted with off-croft work	3
Conflicted with other uses of common grazings	4
Cost of transport	5
Cost of equipment	6
Cost of medicines & vets fees	7
Poor returns	8
Lack of suckler cow quota	9
Diversified into other activities	10
Lack of markets	11

## What Sort of Things Would Help Crofters Keep Cattle?

The table below gives you some ideas given by crofters and farmers in the north west last year:

Item	Rank
Affordable lease (/buy) of suckler cow quota	1
Access to Machinery & equipment via a group	1
Start up loans/grants	2
'lease to buy' cattle	3
Being part of a township or producers group herd	4
Fencing hill ground	4
Group transport to market	5
Advice about cattle health	6
Advice about cattle breeds	6
Advice on growing winter feed	6
Advice about cattle feed	7
Group marketing of beef	7
Group marketing of cattle	8
Advice about marketing cattle & beef	8
Change in township grazing practises	9
Group membership of Health Schemes	9
Breeder's Associations	10
Attending &/or showing at Agricultural Shows	11