

**DOWNLAND**<sup>®</sup>  
PARTNERS IN FARMING HEALTH

# ESSENTIAL

## TRACE ELEMENT BOLUS RANGE

Our **ESSENTIAL** boluses provide the most consistent, cost-effective and reliable method of trace element supplementation there is.



[www.downland.co.uk](http://www.downland.co.uk)



# ESSENTIAL

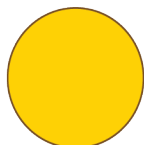
## TRACE ELEMENT BOLUS RANGE

Downland **ESSENTIAL** trace element boluses feature the latest erosion dispersal technology to ensure your cattle, ewes and lambs get the vital nutrients they need for optimum health and performance at all times.

With cattle and ewe boluses lasting six months and lamb boluses four months, one simple application ensures a consistent supply of vital nutrients through key production stages to help maximise fertility and production.

Available in a range of formulations delivering precise daily amounts of Selenium, Iodine and Cobalt plus Copper if needed, our Essential boluses provide the most consistent, cost-effective and reliable method of trace element supplementation there is.

Downland **ESSENTIAL** rumen boluses are administered using a special, unique applicator that ensures minimum stress and discomfort for the animal. The boluses are designed to sit in the rumen where they slowly release measured amounts of key nutrients each day with no lag period.





- **Groundbreaking nutrient delivery system**
- **Available with or without Copper**
- **Delivering up to six months essential daily requirements**
- **Only one simple application needed**
- **Full range for all ruminant needs**

The scientifically proven technology in our **ESSENTIAL** boluses delivers the correct level of nutrients for your stock over the design life of the bolus with no peaks and troughs.

# ESSENTIAL

## TRACE ELEMENT BOLUS RANGE

### Why you should take trace elements seriously

**Low Copper** intake gives reduced growth, depressed immunity and poor reproductive performance. If left unchecked, it can lead to anaemia, lameness, scouring and death. Low copper is caused by a lack of copper in the diet or high molybdenum, iron or sulphur content in forage.

**Low Iodine** in stock causes reduced fertility, poor weight gain and general ill thrift, late abortions, still birth, perinatal mortality, reduced milk yield and quality, metabolic disorders as well as increased susceptibility to infectious diseases, scours and parasitism.

**Low Selenium** causes white muscle disease, increased incidence of still birth and depressed fertility.

**Low Cobalt** levels in stock causes depressed appetites and signs of general ill thrift.

For the best advice about trace element supplementation please contact your local Downland retailer who will be more than happy to help you select the best **ESSENTIAL** bolus to match your stock and farming system.



# THE DOWNLAND PHILOSOPHY

The eroding technology that is the foundation of the Downland **ESSENTIAL** bolus range enables Downland retailers to make a promise to our farming customers:

**THE BEST ADVICE**

**THE BEST PRODUCTS**

**THE BEST VALUE.**

# THE BEST ADVICE

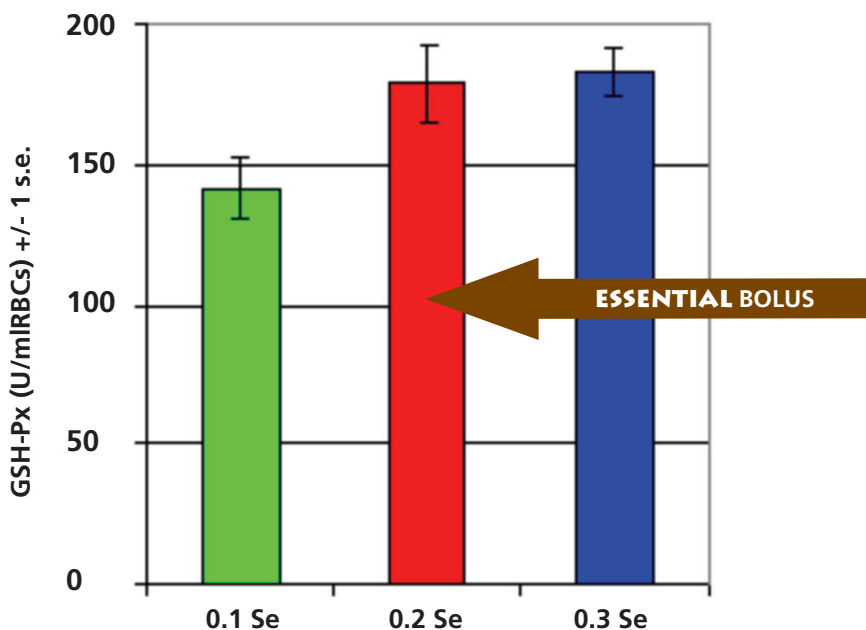
## MATCHING ANIMAL REQUIREMENT

On a UK farm with a history of low selenium, sheep were supplemented with boluses containing 3 different levels of selenium.

Results confirmed that the **ESSENTIAL** bolus significantly increased GSH-Px compared to the lower level of supplementation BUT there was no significant difference between the **ESSENTIAL** formulation and the one containing a higher level of selenium.

The message? You don't need any more selenium than the amount delivered in the **ESSENTIAL** formulation.

Sheep on a low selenium site in Shropshire were given boluses with 3 different levels of selenium



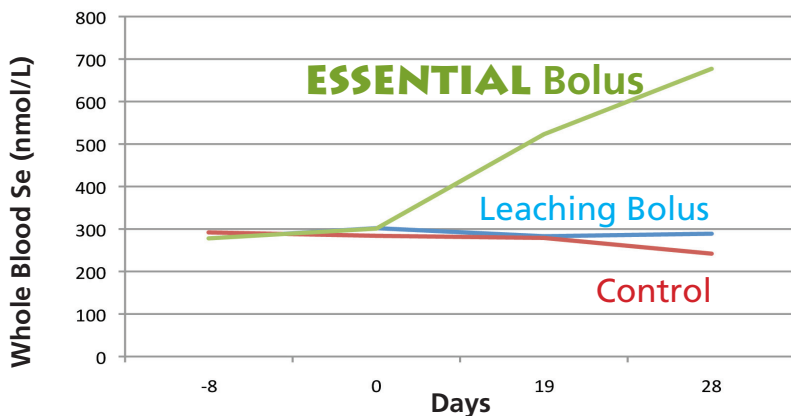
# THE BEST ADVICE

## SUPPORTED BY EFFICACY DATA

**ESSENTIAL** boluses are supported by efficacy data generated both in the UK and overseas. This means that proof of efficacy is available giving farmers further assurance that the products really do work.

The blood and liver selenium levels of cattle grazing pasture with a marginal selenium status were measured before and after administration of both **ESSENTIAL** and leaching boluses.

### Whole blood Selenium following bolus administration



### Liver Selenium following bolus administration

Method	Day		
	n	-8	28
Hepatic Se (nmol/kg)			
Leaching Bolus	10	1100	1052
Control	10	1200	860
<b>ESSENTIAL</b> Bolus	10	1098	2200

The results show an immediate and consistent response in the group given **ESSENTIAL** boluses.

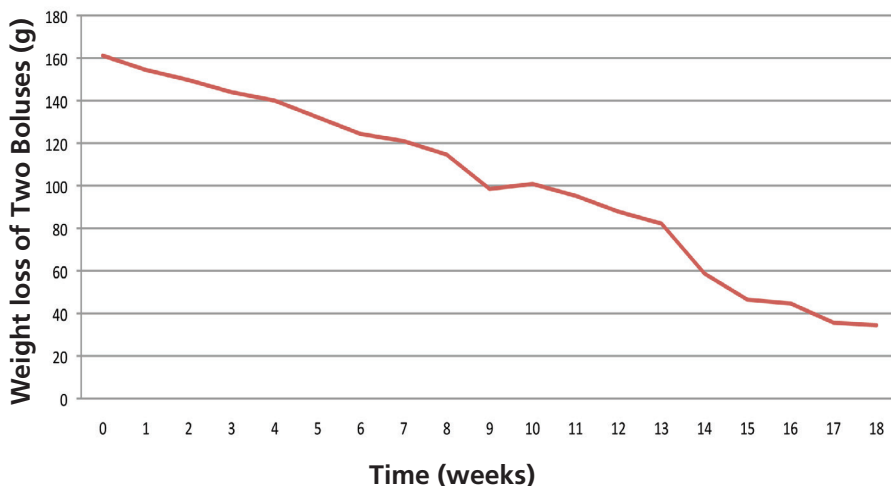
# THE BEST PRODUCTS

## IMMEDIATE AND CONSISTENT SUPPLY OF TRACE ELEMENTS

**ESSENTIAL** boluses are tested in fistulated cattle. This means we can measure the rate of breakdown of the boluses in order to show that the boluses start delivering nutrients right away and will continue to give accurate levels of trace elements every hour, of every day for their full active life.

The graph below shows the consistent release profile of an **ESSENTIAL** eroding bolus in fistulated cattle on grass over a period of 18 weeks.

### Mean Release Profile of fistulated cows with **ESSENTIAL** Eroding Boluses.

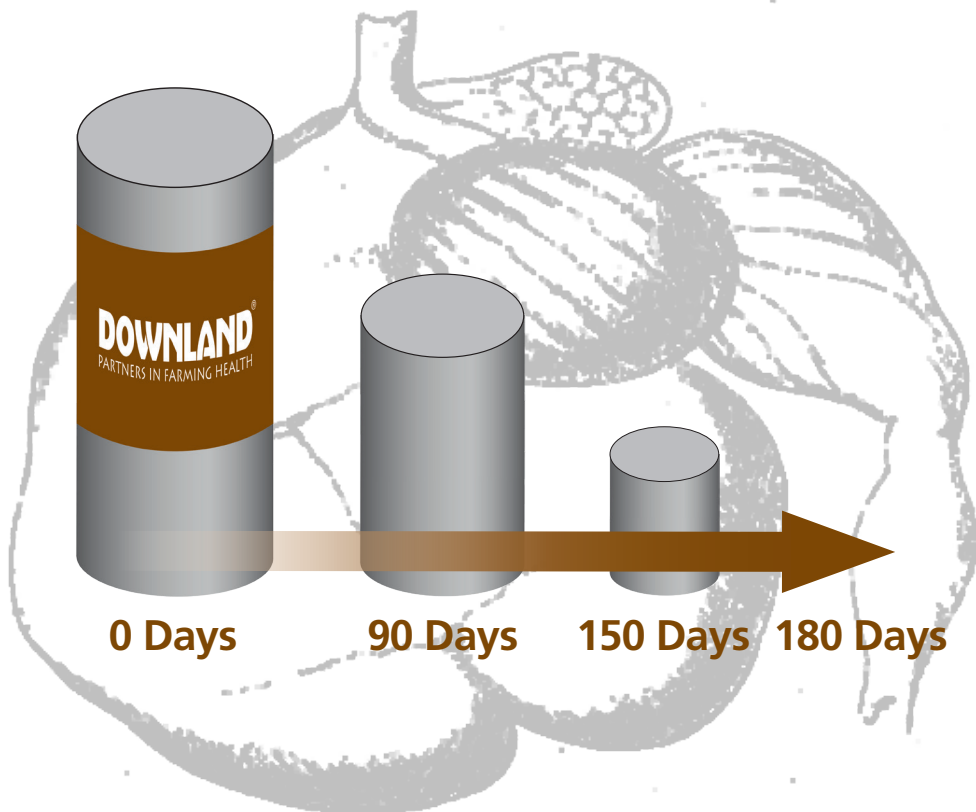




# THE BEST PRODUCTS

## UNIFORM DENSITY MEANS BETTER RETENTION

**ESSENTIAL** boluses have a uniform density throughout their active life. This means that even after 100 days or more the bolus residue remains dense enough to stay in the reticulum reducing the risk of regurgitation. Uniform density ensures that each bolus is effective from start to finish. The diagram below illustrates this.

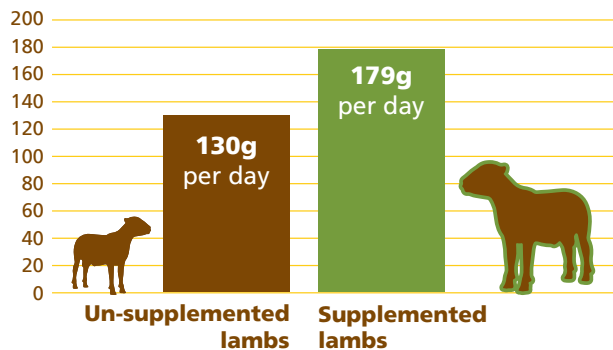


# The correct trace element supplementation gives a 38% increase in weight gain in deficient upland lambs

Following a trial by the University Of Glasgow School Of Veterinary Medicine, lambs supplemented with lamb boluses achieved an increased daily live weight gain of 49g per day when compared with un-supplemented lambs.

The mean daily live weight gain of lambs supplemented with lamb boluses (179g per day) and the unsupplemented lambs (130g per day) as shown in the graph. Supplementation was associated with increased post-supplement DLWG of 49g per day when compared with un-supplemented lambs.

## Average Daily Live Weight Gain



Average DLWG (grams per day) from 795 lambs from a hill farm in eastern Scotland, supplemented or not supplemented. Data was taken from the time of bolus supplementation until the final weighing of each lamb.




**ASSOCIATION BETWEEN TRACE ELEMENT BOLUS SUPPLEMENTATION ON LAMB GROWTH RATES ON A SCOTTISH HILL FARM.** Kim Hamer, Hannah Mylin, Katharine Denholm. University of Glasgow, School of Veterinary Medicine, Garscube Estate, Glasgow, Scotland, G61 1QH <http://dx.doi.org/10.1136/vetreccr-2020-001099>



# THE BEST VALUE

## LESS LABOUR = LOWER COST

**ESSENTIAL** boluses are given as a simple, single bolus administration. This means that they are quick and easy to give, even for large animals, resulting in less time and less cost for farmers.

<p><b>Cattle 400kg upwards</b></p>		<p><b>= 1 bolus</b></p>
<p><b>Growing Cattle 200 - 400kg</b></p>		<p><b>= 1 bolus</b></p>
<p><b>Sheep 40kg upwards</b></p>		<p><b>= 1 bolus</b></p>

# ESSENTIAL



## FOR CATTLE

- Better cow condition and improved conception rates
- Reduced calving spread and easier, cleaner calvings
- Healthier calves and optimum growth rates



## ESSENTIAL CALF+

A bolus especially formulated for ruminating calves between 100 and 200kg, providing sustained release of trace elements for 6 months. Available in packs of 20 boluses (20 applications).

Trace Element	Average daily supply over 6 months from one 58 g bolus
Copper	46.7 mg
Iodine	4.2 mg
Cobalt	0.8 mg
Selenium	0.4 mg



## ESSENTIAL GROWING CATTLE+

Designed to give growing cattle the correct levels of key trace elements for maximum live weight gain. Contains Iodine, Selenium, Cobalt and Copper. Suitable for animals 200kg – 400kg. Available in packs of 20 boluses (20 applications).

Trace Element	Average daily supply over 6 months from one 150 g bolus
Copper	93.3 mg
Cobalt	2.2 mg
Iodine	23.0 mg
Selenium	1.0 mg

Each application lasts 6 months.



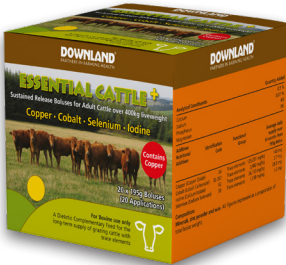


## ESSENTIAL CATTLE

A bolus especially formulated for breeding cattle of over 400kg in weight. Contains optimised levels of Iodine, Selenium and Cobalt. Available in packs of 20 boluses (20 applications).

Trace Element	Average daily supply over 6 months from one 160 g bolus
Cobalt	2.7 mg
Iodine	28.3 mg
Selenium	1.2 mg

Each application lasts 6 months.

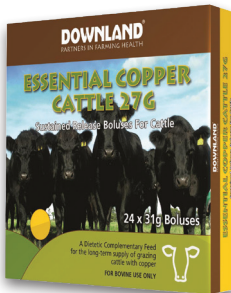


## ESSENTIAL CATTLE+

As per our standard adult cattle bolus but also containing copper for stock on low copper pasture. Available in packs of 20 boluses (20 applications).

Trace Element	Average daily supply over 6 months from one 195 g bolus
Copper	140 mg
Cobalt	2.7 mg
Iodine	28.3 mg
Selenium	1.2 mg

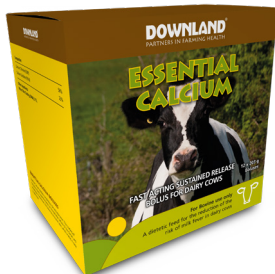
Each application lasts 6 months.



## ESSENTIAL COPPER CATTLE 27G

Copper bolus containing just copper suitable for cattle 200kg – 400kg. Available in packs of 24 boluses (24 applications for cattle under 250kg, 12 applications for cattle over 250kg). Each application lasts 6 months.

Trace Element	Average daily supply over 6 months from one 31 g bolus
Copper	126 mg



## ESSENTIAL CALCIUM

Fast acting sustained release calcium bolus for adult dairy cows over 400kg in weight.

Trace Element	Total supply from one 201 g bolus
Calcium Chloride (E509)	31 g
Calcium Sulphate (E516)	12 g
<b>TOTAL CALCIUM CONTENT</b>	<b>43 g</b>

# ESSENTIAL



## FOR SHEEP

- Maintains trace element status of the flock
- Improves fertility and produces stronger, healthier lambs

## ESSENTIAL SHEEP

Developed to be given to adult ewes pre-tupping or pre-scanning. Helps improve fertility resulting in higher conception rates and lambing percentages. Lambs have greater thrift too. For ewes above 40kg. Available in packs of 40 boluses (40 applications).

Trace Element	Average daily supply over 6 months from one 48 g bolus
Cobalt	0.8 mg
Iodine	5.1 mg
Selenium	0.4 mg

Each application lasts 6 months.

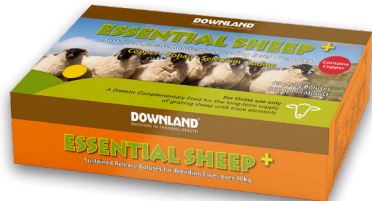


## ESSENTIAL SHEEP+

Same as our adult ewe bolus but also containing copper for stock on low copper pasture. Available in packs of 40 boluses (40 applications).

Trace Element	Average daily supply over 6 months from one 52 g bolus
Copper	18.7 mg
Cobalt	0.8 mg
Iodine	5.1 mg
Selenium	0.4 mg

Each application lasts 6 months.



## ESSENTIAL COPPER EWE 4G

Copper bolus containing just copper suitable for ewes over 40kg. Available in packs of 250 boluses (250 applications).

Trace Element	Average daily supply over 6 months from one 4 g capsule
Copper	18.7 mg

Each application lasts approximately 6 months.



# ESSENTIAL



## FOR LAMBS

- Helps reduce stress of weaning
- Makes up for mineral shortfalls in grazing



## ESSENTIAL LAMB

A specially designed mini-bolus designed to give growing lambs the best start possible. Helps reduce the nutritional stress of weaning and variable grazing. Suitable for lambs over 25kg with a fully developed rumen. One application lasts for 4 months. Available in packs of 200 boluses (100 applications).

Trace Element	Average daily supply over 4 months from two 6 g boluses
Cobalt	0.9 mg
Iodine	1.0 mg
Selenium	0.2 mg



## ESSENTIAL COPPER LAMB 2G

Copper bolus containing just copper suitable for lambs over 25kg. Available in packs of 250 boluses (250 applications). Each application lasts approximately 6 months.

Trace Element	Average daily supply over 6 months from one 2 g capsule
Copper	9.3 mg

# DOWNLAND<sup>®</sup>

PARTNERS IN FARMING HEALTH



# ESSENTIAL

## TRACE ELEMENT BOLUS RANGE

Optimum Health through Administration  
of ONE SINGLE BOLUS

Your local Downland retailer is:

Downland Marketing Ltd., Warwick Mill, Warwick Bridge,  
Carlisle CA4 8RR. Tel: 01228 564498  
bestadvice@downland.co.uk [www.downland.co.uk](http://www.downland.co.uk)