



**DRYSTOCK
FARM NUTRITION SOLUTIONS**



Welcome to AgriSea

Our family philosophy is simple:

*"To provide highly effective products
with bucket loads of integrity"*

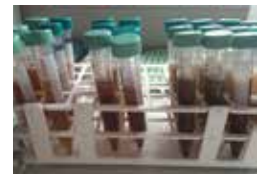
AgriSea NZ Ltd is a multi-award winning sustainable New Zealand company, family owned and operated. The company produces Seaweed concentrates and bioactive extracts for Soil, Foliar, Apiculture, Pasture and Animal Nutrition available in both liquid & solid form.

The New Zealand native seaweed species (*ecklonia radiata*) is batch-brewed with specially selected essential herbs for up to 90 days. The natural fermentation process eliminates the use of processing with heat, chemicals, freezing or dehydration that might 'denature' the sensitive nutrient balance, allowing the natural growth stimulants, micro-nutrients and bioactive compounds to be released in an active form to enhance soil, plant and animal health. AgriSea's natural brewing methods are unique for commercial production.

Research into the benefits of seaweed has been more advanced internationally than in New Zealand, as seaweed products have been used internationally for generations. AgriSea would like to provide research that is specific to NZ seaweed. AgriSea is committed to funding ongoing research trials in NZ to establish accurate data relating to the efficacy of its products.

We stand behind our products...you can ring to speak to us on

0800 SEAWEED



A Kiwi company
through and through

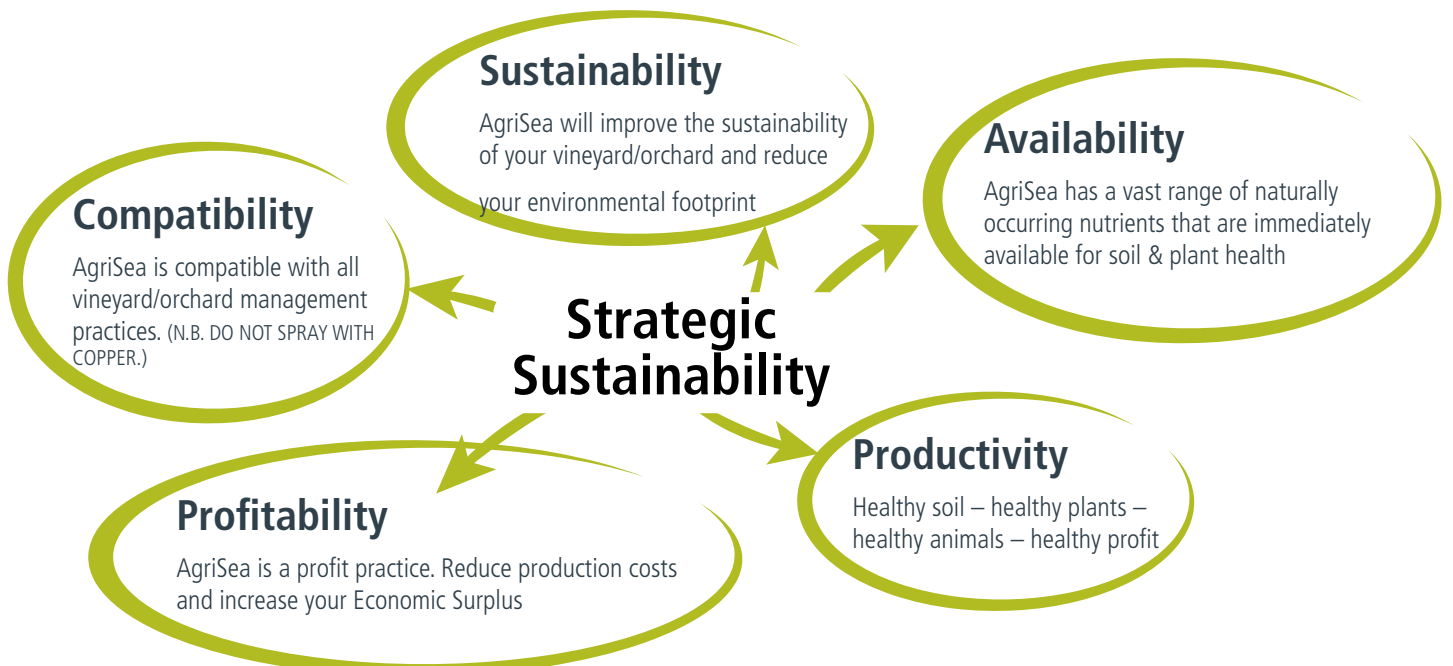




Why AgriSea?

There are significant economic and environmental challenges facing the Sheep and Beef industry today. AgriSea provides highly effective, financially and environmentally sustainable farming solutions. While all our products are certified organic, 98% of our farmers are non organic.

AgriSea maximises all farm management systems (conventional, biological or organic) resulting in significantly increased farm health, production and profitability. This is achieved via better:





AgriSea Soil Nutrition

Since the 1950's, farming practices have focused on the soil chemistry – high input, synthetic compounds to push production and yields. While the initial results were good, we are now increasingly aware of the long term effects of these practices – on the quality of our farms, our farm outputs, our land and waterways.

Healthy soil is the basis for agriculture and the necessary foundation for healthy plants and healthy animals.

AgriSea Soil Nutrition is a soil bio-stimulant which will feed your soil biology thereby improving your soil structure and soil fertility. Soil biology (or soil life) creates soil structure and produces soil nutrients in a plant available form.

An active and diverse soil biology ensures an ongoing feed source for your pasture and animals. AgriSea Soil Nutrition also allows for the numerous minerals and nutrients already in your soil to be utilised – ensuring the ongoing benefit of the previous solid / nitrogen investments made on your farm.

Healthy soil - Healthy pasture - Health animals

Soil +

Now available in a solid and liquid form

AgriSea Soil + is a unique blend of AgriSea liquid Soil concentrate and natural Zeolite allowing for a solid, sustained slow release, high nutrition product.

WHAT IS THE ROLE OF ZEOLITE?

Zeolite in Soil + is a high quality carrier for AgriSea liquid seaweed concentrates. Zeolite is a natural Aluminosilica formed by volcanic activity 200,000 years ago. All AgriSea Zeolite is mined locally in the central North Island of New Zealand.

Zeolite holds nutrients in the root zone for plants to use when required. The nutrient release from Zeolite is plant driven setting up a natural cycle for uptake. This leads to more efficient use of fertilisers and conditioners as the zeolite "recharges or reabsorbs" once its initial nutrients have been released.

Unlike other soil amendments it does not break down, remaining in the soil to help improve nutrient and water retention permanently.

The Benefits of AgriSea Soil Nutrition include:

- Huge increase in your soil biology and 'voluntary army' (microbes and earthworms)
- Increased root length and mass
- Increased soil quality and fertility
- Improved soil structure (aeration, drainage, can withstand traffic)
- Deeper humus layer (nutrient storehouse of your soil)
- Locked minerals and nutrients in the soil become bio-available
- Increased clover content – stable nitrogen source (reduced need for solids)
- Less pugging and pulling
- Increased germination rates for cropping and regrassing
- Increased crop yield and pasture quality
- Farm holds longer and recovers quicker in drought

Ease of Use

- Safe and non-toxic
- Spray or Spread – Boom, Rose, Jet, Chopper
- Compatible for use with other products
- Fine filtration ensures no clogged lines or spray nozzles





AgriSea Pasture Nutrition

Pasture **quantity** is important in terms of stocking rates and feed, but it is the pasture **quality** that significantly impacts on your overall animal health, production and profitability.

AgriSea Pasture Nutrition is an efficient method of delivering an instant nutrient lift directly to your pasture - significantly lifting the quality and fibre of your pasture, crops and stored feed. Pasture Nutrition is also a valuable tool for by-passing root absorption problems (such as nutrient leaching and poor soil structure) and a well known 'stress reliever' for pasture when strained by weather extremes or pest and disease pressure.

AgriSea Pasture Nutrition provides a natural balance of nutrients in a form your pasture and animals can readily absorb and convert – maximising your pasture quality, palatability and yield.

Combo +

Now available in a solid and liquid form

AgriSea Combo + is a unique blend of AgriSea Pasture Nutrition and Soil Nutrition all encapsulated in natural Zeolite allowing for an easy to apply sustained nutrient release. The unique blend of products allows for application efficiency.

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Zeolite holds nutrients in the root zone for plants to use when required. The nutrient release from Zeolite is plant driven setting up a natural cycle for uptake. This leads to more efficient use of fertilisers and conditioners as the zeolite "recharges or reabsorbs" once its initial nutrients have been released.

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The Benefits of AgriSea Pasture Nutrition include:

- Greener, healthier pasture and crops due to increased chlorophyll levels
- Significant lift in the fibre, protein and overall nutritional value of your pasture
- Increased DM yields
- Increased brix (natural sugars) levels in pasture
- Increased natural nitrogen fixation
- Increased palatability in pasture and stored feed
- Pasture more vigorous and durable in times of stress
- Increased pasture resistance to disease and pests
- Healthy stock due to high nutritional value of grass
- Nutritional lift for herd in periods of low light - spray ahead of cows in winter
- No chemical additives; no residues; no withholding

Ease of Use

- Safe and non-toxic
- Spray or Spread – Boom, Rose, Jet, Chopper
- Compatible for use with other products
- Fine filtration ensures no clogged lines or spray nozzles





John Gray, Farm Manager
for Chris Barker, Mahoenui

AgriSea

Animal Nutrition / Health Tonic

Most animal health problems are a direct result of nutritional deficiency including: Sleepy Sickness - Pink Eye - Scabby Mouth - Worm Burden - White Muscle Disease. AgriSea Animal Nutrition provides a vast range of natural nutrients, minerals, vitamins and trace elements that are immediately bio-available to your animals. These include Vitamin A, Vitamin C, Vitamin E, Folic Acid, Vitamins B1, B2, B3, B5, and B12.



AgriSea Animal Health Tonic bolsters the immune system and prevents a variety of health problems directly related to nutritional deficiency. It increases resistance and recovery during periods of stress.

Seaweed Salt Block

AgriSea Seaweed Salt Block contains a unique blend of Ecklonia Radiata seaweed and our specially batch brewed Animal Health Tonic. Together this blend of natural products provides livestock with an additional source of essential elements, vitamins, minerals and amino acids to boost overall Animal Health.

Animals have sought salt since the beginning of time, gathering at salt licks to satisfy their need for salt. Many New Zealand soils and pastures are naturally low in available sodium.

Sodium deficiencies are manifested as abnormal licking or chewing of wood, soil and sweat of other animals and may be accompanied by a decline in growth rates and/or milk production. Common Salt (sodium chloride) is an essential constituent of animal diet. Because many New Zealand pastures are deficient in sodium some form of supplementation is often necessary. For instance, dry cattle a minimum of 10gms and sheep a minimum of 2gms.



SALT BLOCK PRODUCT ANALYSIS

Minerals and Trace Elements (mg/L - ppm)		
Sodium Chloride 95%	Calcium 1529	Magnesium 610
Potassium 3184	Sodium 279	Copper 3
Phosphorus 1941	Iron 992	Iodine 301
Zinc 51	Organic Carbon 15	Tin 5
Phlorotannins 6-8% dry mass		Proline 398
Tyrosine 171	Manganese 17	
Selenium 0.2		

Vitamins

Vitamin B12 3.95

Amino Acids (mg/100g)

Aspartic Acid 971	Glutamine 976	Serine 381
Histidine 50	Threonine 415	Arginine 451
Alanine 583	Valine 402	Methionine 253
Phenylalanine 381	Isoleucine 380	Lysine 391
Leucine 649		

AgriSea How To Guide

Doseage Rates



ANIMAL NUTRITION DOSE RATES

Cows:

- Onto dry feed – 25mls per cow
- Drenching – 60mls per week
- Down/sick cow – 3 x 500mls over 24 hours, 250ml x 3 days
- Dosatron 10mls per cow per day 4 wks prior to calving until end of mating
- 5mls per cow until 4 wks prior to drying off then 10mls until drying off
- Dry 5ml per cow per day
- Facial Eczema Prevention - drench 20mls late summer

Calves:

- 20mls on arrival at the shed
- 5mls per calf per day in milk until weaning
- Weaning through to first calving 5mls per animal per day
- Ill Thrift/scours/staggers – 100mls three times over 24 hour period.

Sheep

Autumn: Lambs -10mls with oral drench to improve growth rates and well being.
 Winter: Hoggets/Ewes 20mls - Post Crop/ Pre lamb
 Spring: Lambs docking/tailling - drench 10mls, Ewes 20mls
 Summer: Lambs weaning - drench 10mls

Ewes - drench 20mls optional
 Ewe Pre-tup - drench 20mls
 Rams Pre-tup - drench 30mls

SALT BLOCK DOSE RATES

Seaweed Salt Block 20kg Sheep/Goats: 1 block per 50
 Cattle/Deer/Horses: 1 block per 10 stock units

DIRECTIONS FOR USE

Cut around carton – leave the block in tray for added convenience and protection : Place the blocks near areas where stock gather.

ANIMAL + DOSE RATES

Cows 15 g per day Yearlings 10g per day
 Calves (post Weaning) 5g per day

SEAWEED PELLET DOSE RATES

Cattle	Adult	20g per animal per day
	Yearling	10-15g per day = 27 pellets
Sheep	Calves	5g per day = 9 pellets
	Adult	3g per day = 6 pellets
	Hogget	2g per day = 4 pellets
Goats and Alpacas		3g per day = 6 pellets
Deer	Adult	5g per day = 9 pellets
	Weaners	2g per day = 4 pellets

Application Rates



Soil Nutrition
 5 litres per hectare

AgriSea Solid Soil+ Autumn & Spring
 20kg/ ha



Pasture Nutrition
 5 litres per hectare

AgriSea Solid Combo+ Autumn & Spring
 30kg/ ha



Application Times

Optimum application times are early morning
Earth temp – no lower than 6°C **Air temp** – no lower than 10°C or late evening.

AgriSea Liquid Soil and Pasture Condition
 May/June August/Sept Nov/Dec Feb/Mar
 5L/ ha

Please Note:

These rates are intended as a guide only.
 Application rates will be largely dependent on your current farming system, your specific farm needs and goals.

Application Methods



Air Based Method: Helicopter, Plane
 Air Based Application: 1 part AgriSea to 2 parts water
 (Optimum 1 to 3)



Ground Based Method:
 Tractor, Boom, Rose, Jet, Quad, C-Dax

★ Fine filtration ensures no clogged lines or spray nozzles



Ground Based Application:
 1 part AgriSea to 30 parts water
 (Optimum 1 to 50)
 Quad: 60 litre tank
 1 part AgriSea to 6 parts water



Solid Based Method:
 Incorporated into fertiliser spreader, tow behind spreaders, aerial plane or helicopter

★ Compatible for use with other products

Ground based, tractor, boom or flood jets ;
 5Ltr pasture conditioner per hectare approx 150 litre water per/ha.

Quad bike – 50ltr tank (2.5 litres soil, 2.5litres pasture with 45litres of water) travel at 9kms per hour should cover over 1 ha.

Quad bike - 60 litre tank (3 litres soil, 3litres pasture with 54litres of water) travel at 9kms per hour should cover 1.5 ha.

Note: Soil temp must be above 6 degrees and air above 10 degrees, apply early morning or evening, treat as if watering garden ie, direct sunlight and water can burn grass. Dew acts as a good water carrier. Soil and Pasture conditioners translocated with 1 hour of application. No withholding period.



For your free, no obligation soil assessment, please contact your local AgriSea Field Agent or Customer Services on **0800 SEAWEED** who will arrange this for you.

Top Customer Service

Ours is a partnership – we're committed to assisting you to reduce production costs while maintaining high production, high yields and high profits.

We'll partner you with a highly trained Area Field Consultant along with specialist Advisors.

Personal Guarantee

Our family stands behind our products. We promise to deliver high quality, effective products which will reduce your environmental footprint and add value to your farm.

For more information or for your free, no obligation soil assessment please phone your Area Field Consultant or AgriSea Customer Services on 0800 SEAWEED.



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www.agrisea.co.nz

Soil Product Typical Analysis

Minerals and Trace Elements (mg/L - ppm)

Nitrogen 50.45	Phosphorus 32.29	Potassium 864.71	Sulphur 53.48
Calcium 41.37	Magnesium 74.47	Sodium 524.68	Iron 1.17
Copper 0.077	Manganese 0.989	Iodine 43.38	Molybdenum 0.01
Selenium 0.01	Zinc 1.11	Boron 1.251	Cobalt 0.01

Vitamins

Vitamin A, Vitamin C, Vitamin E, Folic Acid, Vitamins B1, B2, B3, B5, B12, Fucoxanthin, Choline

Amino Acids (mg/100g)

Aspartate 971	Histidine 50	Lysine 391	Phenylalanine 381	Tyrosine 171
Asparagine 1.141	Proline 398	Glutamine 976	Alanine 583	Isoleucine 380
Serine 381	Arginine 451	Leucine 649	Threonine 415	Valine 402
Methionine 253				

Cytokinins & Auxins

Trans-zeatin riboside, Trans zeatin, Indole Acetic Acid, Isopentenyladenosine, Isopentenyladenine

Phlorotannins 8-10% g dwt

Mannitol 3500 µmol g dwt

*Declared values are considered averages and are subject to seasonal variation.

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