

# GRASS HARROWS & AIR SEEDERS



“

Look after your grass,  
**UNLOCK HIDDEN PROFIT**

”

# GRASS HARROWS & AIR SEEDERS

## ✓ REVITALISE, REJUVENATE & RE-SEED

The OPICO grass harrow has revolutionised grass harrowing: larger working widths, more adjustment and aggressive spring tines mean that a better job can be achieved faster and at a lower cost.

Thanks to the unique contour flexing tine bed the OPICO grass harrow covers every inch of the ground.

Ripping out moss, opening the surface, improving aeration and encouraging growth with a net effect of a more vigorous and revitalised ley.

After harrowing, the grass can often appear darker green, thanks to the breakdown of the crust on the soil surface releasing nitrogen to the growing ley.

The OPICO grass harrowing concept simply transforms the way you work your grass.



## ✓ REVITALISE YOUR LEYS

OPICO Grass Harrow will:

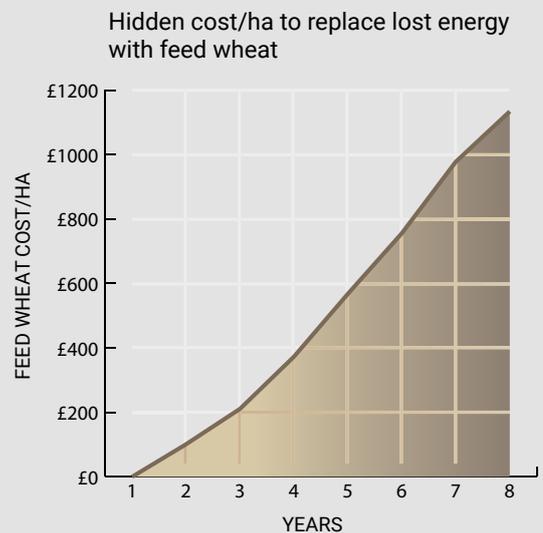
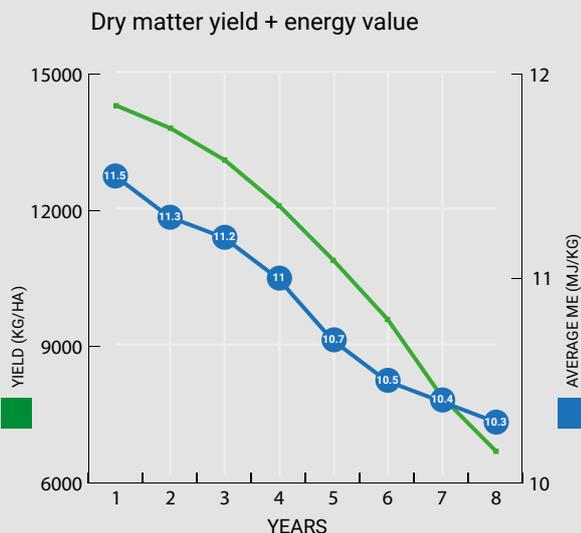
- Clear out moss and trash clogging the base of the sward
- Drag out shallow-rooted weeds like chick weed and annual meadow grass
- Open up the soil surface allowing oxygen in to the root zone
- Release locked-up surface nitrogen
- Break up and disperse clumps of slurry and muck
- Flatten molehills to prevent silage making problems

## ✓ UNLOCK HIDDEN PROFIT

Grass is the cheapest source of animal feed and a planned approach to grass production will see feed bills and margins improved. By looking after your grass you will be unlocking hidden profit.

Better quality grass, with a high dry matter content, results in extra milk, or increased live weight gain from forage rather than costly concentrates.

**A year on year drop in yield and quality means there is a hidden cost of making up this shortfall in energy.**



Typical feeding value and yield of a medium term cutting ley (NIAB data) and cost to replace the lost energy with feed wheat of 13.7ME, 86% DM and £140/t

## ✓ THREE OPTIONS FOR MORE PRODUCTIVE LEYS

Existing leys can be revitalised, but, by attaching an OPICO seeder, old worn leys can be over-sown or brand new leys can be established.

### 1 SCARIFY & REVITALISE EXISTING LEYS

Existing leys can be re-vitalised and dry matter boosted.



### 2 SCARIFY, REVITALISE & OVERSOW EXISTING LEYS

Relatively low cost overseeding into an existing ley boosts yield and prolongs the useful life of the sward. This is especially useful where poor drainage or flooding has killed off grass in certain areas of a field or where livestock have poached ground near gateways and troughs.

With few effective clover-safe herbicides around, many farmers have adopted the approach of ridding the leys of perennial weeds, like docks and thistles, and then stitching in clover once a clean grass ley has been established.



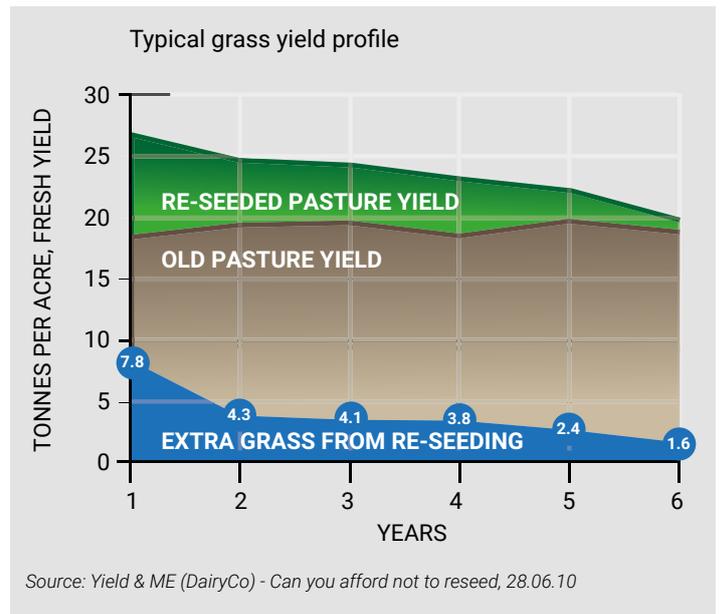
RYEGRASS SEEDLINGS 21 DAYS AFTER OVERSOWING

### 3 START AFRESH & PUT DOWN A NEW LEY

A complete reseed will bring back vitality and maximise yields. Modern grass varieties in seed mixtures have been bred for higher yields, better nitrogen uptake and digestibility than older grass varieties.



Typical grass yields increase by 20-30% and energy is likely to increase by +1 mj/kg DM (in the first year re-seed).



### ✓ BEST PRACTICE

For leys to reach their full yield potential and quality an integrated approach to grassland management is essential.

As well as harrowing, this includes maintaining good drainage, avoiding soil compaction, reseeding with grass and clover mixtures appropriate to livestock and purpose, timely weed and pest control as well as tailored fertiliser application to compensate for soil nutrient shortfalls.

Where ground is too heavy or too thin to work with conventional drills the OPICO harrow and seeder combination on a light tractor will get the job done efficiently. OPICO advise rolling the field at least once after cultivation to obtain a good firm seedbed before harrowing and seeding as well as afterwards for optimum seed to soil contact.

# A HARROW DESIGNED FOR ALL CONDITIONS

The OPICO Grass Harrow has revolutionised grass harrowing: larger working widths, more adjustment and aggressive spring tines mean that a better job can be achieved faster and at a lower cost.

With typical working speeds of 4½mph to 7mph the Grass Harrow is a high capacity machine. For example a 6m machine is more than capable of covering over 100 acres in a normal working day.

## ✓ THE RANGE



Working widths range from a very handy 1.5m to 12.4m. There are rigid and hydraulic folding units with a choice of 7mm or 8mm tines.

The machines are designed for strength without the need for high horsepower and are equipped with a fully adjustable depth wheel, which works alongside the tine angle settings for maximum effectiveness.

The hydraulic folding models have a single acting ram that allows the grass harrow to be folded and unfolded from the tractor seat.

## ✓ HYDRAULIC CYLINDER



Hydraulic cylinder with lock to ensure safety during road transport.

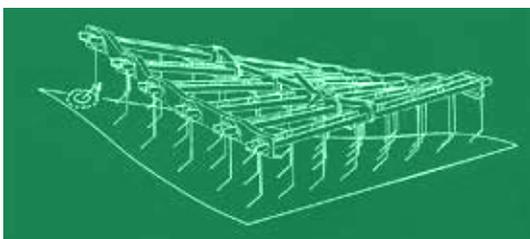


**6m OPICO Grass Harrow**  
Transport height: 2.85m  
Transport width: 2.5m  
3x2.0m bed sections  
180 tines  
520kg  
60hp

## ✓ FLEXIBLE BED

The flexible design of the tine beds allows them to follow the contours of the land ensuring effective coverage and even tine pressure.

With 48 tines per 1.5m bed, each bed has tines spaced at 30mm centres apart. As well as ensuring even tine pressure onto the ground this design allows the harrow to self-clean as it moves through the sward.



## ✓ ADJUSTABLE TINE ANGLE



Ground conditions will determine how aggressive the tine pressure needs to be for effective harrowing.

With 10 clear tine angle settings, pressure and tine angle can easily be adjusted. This ensures the oscillating action of the triple coil spring tine can be maximised across the whole working width.

# REVITALISE! REJUVENATE!



## ✓ FOLDING SYSTEM



When in transport position, the hydraulic folding models fold to between 2.5m and 3m dependent on the model of grass harrow. This allows easy transportation on the road and through narrow gateways.

## ✓ SUPPORT WHEEL

Height adjustable support wheels are used in conjunction with the tine angle when setting the aggression and pressure required on the harrow tines to ensure the correct amount of pressure is applied.



## ✓ CONSTRUCTION

The construction of the headstock consists of interlocking pieces of steel so the Grass Harrow doesn't just rely on the welding for strength.

The frames and beds are powder-coated. Most of the other steel components are anodised so the harrow will stay in good working order and look newer for longer.



## ✓ SPRING TINES



The Grass Harrow's 7 or 8mm spring tines are able to penetrate even the hardest of ground, ripping out dead thatch and opening up the soil surface allowing air into the root zone to stimulate growth.

The oil hardened sprung wire has three times the service life of normal sprung steel wire and channel mounting of the tine coil prevents damage to the growing tip and leaf of the grass.

# AIR 8 & AIR 16 SEEDERS

An OPICO air seeder unit is the most cost-effective way to reseed or overseed your pasture.

Easily mounted onto an OPICO grass harrow or any other implement, seed is broadcast consistently and evenly giving complete coverage of the area sown. The seeder is available with 8 or 16 individual outlets.

The seed rate can be varied from 1 to 80kg\* per hectare, according to the type of seed being sown and electronic seeders can be turned on and off which is useful for stitching in patchy areas to existing leys.

Good practice deems that sowing should always be followed with rolling to ensure good soil to seed contact is achieved.

\* Depending on seeder and working width.



MECHANICAL AIR 8 SEEDER

## ✓ ACCURATE SEED-RATE CONTROL

The amount of seed applied is controlled by the speed of the metering roller and is adjusted until the desired seed rate is achieved. The seeder needs calibrating for seeding on each seed type. Once calibrated rates can be adjusted manually or electronically.

## ✓ PRECISE SEED METERING

Unlike many seeders, the OPICO Air 8 and Air 16 use individual metering wheels for each seed outlet enabling extremely accurate seed distribution. This is crucially important when using low seed rates and small seeds.

### FOUR METERING ROLLERS

Both the fine and standard interchangeable rollers are supplied as standard. Dimple and Micro rollers can be purchased as extras.



DIMPLE ROLLER



FINE ROLLER



MICRO ROLLER



STANDARD ROLLER

## THE GRASS HARROW & AIR SEEDER

Primarily designed for forward thinking livestock farmers who appreciate the hidden profit within their grass.



ELECTRIC FAN



**6m OPICO Grass Harrow**  
Transport height: 2.85m  
Transport width: 2.5m  
3x2.0m bed sections  
180 tines  
520kg  
60hp

**OPICO Air 8 SEEDER**  
180 ltrs capacity  
8 seed outlets  
Mechanical drive

## ✓ FORWARD SPEED RELATED METERING

### MECHANICAL DRIVE

All mechanical OPICO seeders have a spoked land wheel drive that follows the contours of the ground to give constant forward speed related seed metering. The land wheel is connected to the metering gearbox via a flexible and greasable 12mm steel drive cable.



The Air 8 mechanical drive seeder has a clever step-less gearbox to ensure reliability. Simple control box with an in cab warning alarm for fan, drive and seed hopper.



### ELECTRONIC DRIVE

The Air 8E and Air 16E electronic machines have a high specification speed sensing motor that is constantly checked and adjusted by the computer control box to give a constant seed rate at all times.

Electronic versions use a radar land speed sensor to feed information back to the control box.



### CALIBRATION



All machines are calibrated by removing the metering roller cover and using the calibration tray.



### DRIVE MECHANISM



A toothed non-slip belt is used for positive drive and all seeders are fitted with a drive belt sensor. The toothed belt also drives the agitator inside the hopper to maintain a steady flow. The agitator can be simply engaged or disengaged as required for delicate seed types.

## ✓ PNEUMATIC SEED DELIVERY

Two 12v electric fans provide the air flow on the Air 8 seeder to accurately deliver the seed down the pipes to the outlets.

A hydraulic fan is optional on the Air 8 and standard on the Air 16.

## THE GRASS MASTER - Heavy Duty Grass Harrow & Air 16E

The OPICO Grass Master is a high output grass harrow and Air 16 seeder designed specifically with contractors in mind. Similar to the standard grass harrow, the Grass Master consists of a heavy duty frame that incorporates a levelling board enabling light cultivation of the seedbed.

Furthermore the Grass Master incorporates a large loading platform making filling and calibrating the seeder very simple and accessible.

The Grass Master hydraulically folds to under 3m so that the operator can move quickly and easily from job to job.

**6m OPICO Grassmaster**  
 Transport height: 3.0m  
 Transport width: 2.8m  
 4x1.5m bed sections  
 192 tines  
 520kg  
 100hp

**OPICO Air 16E SEEDER**  
 400 ltrs capacity  
 16 seed outlets  
 Electronic



HYDRAULIC FAN



Profit from our knowledge

## GRASS HARROW SPECIFICATIONS

Working Width	Weight	Transport Height	Transport Width	HP Req	Harrow Sections	Number of Tines	Depth Wheels
<b>NON-FOLDING</b>							
1.5m	145kg	1.45m	1.5m	20	1x1.5m	48	2x (16x6.5-8)
2.0m	165kg	1.45m	2.0m	23	1x2.0m	60	2x (16x6.5-8)
3.0m	260kg	1.45m	3.0m	25	2x1.5m	96	2x (16x6.5-8)
<b>HYDRAULIC FOLDING</b>							
4.5m	390kg	2.25m	2.5m	35	3x1.5m	144	2x (16x6.5-8)
5.0m	440kg	2.25m	2.5m	40	2x1.5m + 1x2.0m	156	2x (16x6.5-8)
6.0m	520kg	2.85m	2.5m	60	3x2.0m	180	2x (16x6.5-8)
6.0m	530kg	2.85m	3.0m	60	4x1.5m	192	2x (16x6.5-8)
6.4m	550kg	2.6m	3.0m	60	2x1.5m + 2x1.7m	204	2x (16x6.5-8)
7.5m	710kg	3.15m	2.8m	65	5x1.5m	240	2x (16x6.5-8)
8.0m	740kg	3.25m	2.8m	70	4x1.5m + 1x2.0m	252	2x (16x6.5-8)
<b>SCISSOR FOLDING</b>							
9.0m	1010kg	2.75m	2.8m	85	6x1.5m	288	2x (16x6.5-8)
10.5m	1050kg	3.5m	3.0m	90	7x1.5m	336	2x (18x8.5-8) + 2x (16x6.5-8)
12.0m	1170kg	3.4m	3.0m	110	8x1.5m	384	2x (18x8.5-8) + 2x (16x6.5-8)
12.4m	1270kg	3.4m	3.0m	110	6x1.5m + 2x1.7m	396	2x (18x8.5-8) + 2x (16x6.5-8)

\*Weights with 7mm tine. OPTIONS: 7mm or 8mm tine, front levelling board, front mount kit, fence protectors.

## GRASS MASTER SPECIFICATIONS

Working Width	Weight	Transport Height	Transport Width	HP Req	Harrow Sections	Number of Tines	Depth Wheels
<b>With AIR 16E seeder</b>							
6.0m	860kg	3.00m	2.8m	100	4x1.5m	192	2x (18x8.5-8) + 2x (16x6.5-8)
8.0m	1000kg	3.00m	2.8m	100	4x1.5m + 1x2.0m	252	2x (18x8.5-8) + 2x (16x6.5-8)

The Grass Master is a high-output Grass Harrow & Seeder, designed for large-scale farmers & contractors.

## AIR SEEDER SPECIFICATIONS

Model	Working Width	Seedbox Volume	Fan Type	Seed Outlets	Control	Seed rate per hectare *(Dependent on forward speed)	Weight
<b>Suitable for the following seed types: Grass mixtures, clover, lucerne, kale, linseed, rape, stubble turnips and slug pellets</b>							
Air 8	Up to 6.5m	180ltrs	2x Electric - 12v Fans	8	Mechanical	40kg when fitted to 6.0m working width 80kg when fitted to 3.0m working width	66kg
Air 8E	Up to 6.6m	180ltrs	2x Electric - 12v Fans	8	Electronic	40kg when fitted to 6.0m working width 80kg when fitted to 3.0m working width	66kg
Air 16E	Up to 12.5m	400ltrs	1x Hydraulic Fan - 20l/min	16	Electronic	40kg when fitted to 12.0m working width 80kg when fitted to 6.0m working width	130kg

OPTIONS: Step and loading platform, electronic hectare meter. 400 litre hopper to fit Air 8 Seeders. NB. Hydraulic fan requires 0-20 1/min max oil supply and free flow return.



OPICO have been bringing grassland harrows and seeders, manufactured by Hatzenbichler in Austria, to farmers and contractors in the UK for over 25 years.

YOUR LOCAL OPICO DEALER



Profit from our knowledge

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