

# **PROFIT FROM PASTURE**



A PRACTICAL GUIDE TO STRIP GRAZING

## **Frequently Asked Questions**

#### 1. What is Strip Grazing?

Strip Grazing, at times also referred to as *Controlled Grazing*, is a method of rotational, pasture grazing management whereby animals are given controlled access to a limited amount of pasture for a limited amount of time. The area allocated is usually in the shape of a long strip; hence the name, *Strip Grazing*. However the area may vary in shape.

#### 2. What are the advantages of Strip Grazing?

- Reduced wastage as all fodder is consumed
- There is also reduced wastage from reduced trampling and soiling
- Animals will have access to fresh, clean uncontaminated pasture
- > Grass can be grazed when it is short and most nutritious
- > The denseness of the pasture will improve from the regular 'mowing'. Denser pasture, equals more grass with greater carrying capacity, leading to greater profit
- Keeping the grass short enables the inclusion of clovers
- ➤ Having clover in the pasture helps reduce fertilizer costs
- Excess pasture can be ensiled or left to make quality hay
- With the quick rotation, there is a reduction in disease as parasite life cycles are broken
- With back-fencing, regrowth is protected and root reserves are not depleted
- > The dung is spread evenly across the land
- Concentrated hoof action tramples dung in, reduces soil compaction, promoting water ingression
- ➤ The lactating dairy cows can be given access to the fresh pasture, and then the pasture can be 'cleaned up' by the dry cows, heifers or even sheep

#### 3. How does the electric fence work?

An electric fence can best be described as a *Psychological Fear Barrier*. It works on the principle of giving the animal a very short, sharp, painful, yet safe shock which is sufficiently memorable for the animal, having touched the fence once, to remember the experience and so avoid it in the future.

# 4. Will the electric fence affect my cows' milk production?

Electric fences have been used to control dairy cows for almost a hundred years and there are no reports of reduced milk production. In fact, because of the improved grazing management, resulting in increased carrying capacity, profits have always increased when electric fencing has been introduced.

# 5. Will I need to train my animals to respect electric fencing?

Yes. All animals need time and space to become accustomed to electric fences. Do not introduce new animals to electric fencing in a confined area. Animals need space to be able to back off when shocked and not be forced against the fence due to overcrowding.

#### 6. Is electric fencing safe for my animals and labourers?

Yes, very safe, provided the energizer installed complies with the law and meets the strict IEC/SANS 60335-2-76 manufacturing standards and that the fence erected is compliant with the SANS 10222-3-2019 standard. It is therefore important that when purchasing an energizer, you ensure that it has a COC Certificate issued by a registered test laboratory.

#### 7. Which energizer should I use?

The choice of energizer is dependent on a number of factors such as:

- > Whether the system needs to be portable
- > Whether there is mains power available
- What species of animal is to be controlled
- > The age and sex of the species
- > The length of fence line required
- > The type of wire to be used
- > Whether there will be competition from vegetation.

The choice of energizer is discussed in more detail on page 3 of this brochure.

#### 8. How do I tell how powerful an energizer is?

An energizer's energy output is measured in Joules. The higher the Joule rating, the more powerful the energizer. There are two ways of representing this joule rating: as stored energy or as output energy. Stored energy gives a higher value than output energy, as some energy is lost as heat during discharge. It is important therefore, when comparing energizers, to make sure that you are comparing 'apples with apples', i.e. stored energy with stored energy, or output energy with output energy, or you may draw the wrong conclusions.

#### 9. How many strands do I need to control my animals?

This will depend on the species of animal you intend to control, their age, and how often they are handled. A general rule of thumb is to position your live wire at nose or chest height to the animals to be controlled. For example, for cows and calves, one would need two wires, but for tame dairy cows only a single wire will usually suffice.

#### 10. Can I strip graze other animals besides cattle?

Yes, people are successfully strip grazing horses, sheep, goats, alpacas, pigs and even in some extreme cases, geese. Basically, if you understand and apply the basic principles of electric fencing, illustrated on page 1, you can control and strip graze virtually any animal.

# 11. Having chosen an energizer, what is the next most important thing I should consider?

Earthing – without a doubt, earthing. You can choose the most powerful energizer available, but if it is badly earthed, you will not reap the full benefits of electric fencing and strip grazing.

On short portable fences on irrigated pasture, earthing can be quite easy but if you are installing longer fence lines in dry conditions, you need to pay particular attention to your fence configuration and your earth system.

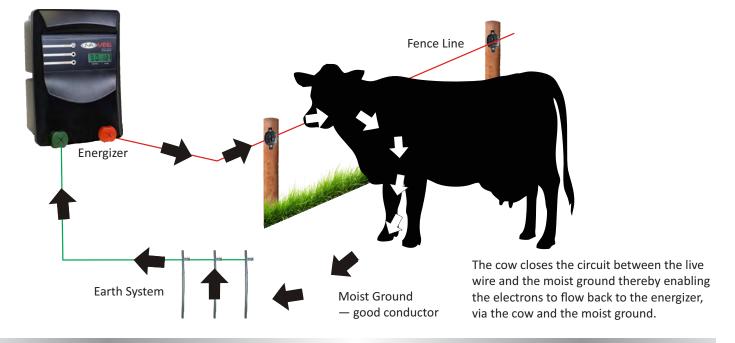
## **Basic Circuits of an Electric Fence System**

An electric fence system comprises of three components: the energizer, the fence line, and the earthing system. When the three are connected together, a circuit is created and the electrons can now flow. If any one of these components is faulty, the whole system will be faulty.

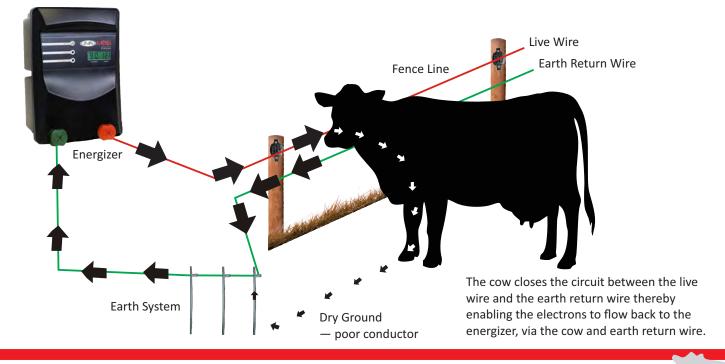
When an animal touches the live wire, it closes the circuit, providing a path through which electrons can flow from the red, positive terminal of the energizer, through the animal, to the green, negative terminal of the energizer. It is this flow of electrons through the animal which gives the shock that the animal experiences.

There are two types of electric fence circuits: one is for moist ground conditions and one is for dry ground conditions. The reason for this is that moist ground is a good conductor of electrons, while dry ground is not. So, dry ground cannot be relied upon to close the circuit satisfactorily.

#### Circuit for Moist Ground Conditions — All-Live-Wire Configuration



#### Circuit for Dry Ground conditions — Alternate Live / Earth Wire Configuration



# **Choosing an Energizer**

Factors that will influence the choice of energizer for a particular application are covered in question 7 on page 1 of this brochure. The table below illustrates suggested energizer choices to fulfil some specific applications.

**Remember:** The effectiveness of the energizer selected will be influenced by the quality of the fence installation and the quality of the earth grid.

	Type of Wire used			Animals to be controlled						
Energizer	650 ft Poliwire	1640 ft Poliwire	1310 ft Politape	Braided 1500 ft /	HSS Gal. 12 1/2gauge	Dairy Cows	Beef Cattle	Sheep or	Horses	Pigs
	Politape			1 mile	1-5 mile			Goats		
JVA PTE100	✓					$\checkmark$			✓	
JVA SV2	✓					✓			✓	
JVA SV5	✓	✓				✓	✓		✓	
JVA SV10	✓	✓	✓			✓	✓		✓	✓
JVA MB1.5	✓	✓	✓	✓		✓	✓		✓	✓
JVA MB3		✓	✓	✓		✓	✓	✓	✓	$\checkmark$
JVA MB4.5		✓	✓	✓		✓	✓	✓	✓	✓
JVA MB8				✓	$\checkmark$	✓	✓	✓		✓
JVA MB12				✓	✓	✓	✓	✓		✓
JVA MB16				✓	$\checkmark$	$\checkmark$	✓	✓		$\checkmark$

# **JVA Solar Energizers for Strip Grazing**

JVA offers a range of Solar Powered, Electric Fence Energizers which are ready to operate straight out of the box! A reliable built-in rechargeable battery and integrated solar panel means JVA Solar Energizers are totally portable, with no need for extra batteries and hardware. Just slide the energizer onto a support post, attach to the fence and switch it on.



#### **JVA Solar Energizer Features:**

- Quality crystalline solar panel and internal battery
- > Front panel on/off switch and LED pulse indicator
- Low Battery indication
- Large easy-to-use fence terminals
- Easy mounting on top of a Y-Standard or U-Bolt to a pole
- Sealed for ant and moisture protection
- On the SV5 and SV10 an LCD shows fence voltage, stored energy and battery voltage
- Auto-Sync technology for safer fences
- Internal battery included.

	SV2	SV5	SV10
Stored Joules	145mJ	650mJ	1.1J
Energy Output	120mJ	500mJ	0.8J

#### **JVA Portable Energizers**

Perfect for temporary electric fences, strip grazing, horse riding events, holding paddocks or just keeping Fido out of the garden, these portable units are easy to use yet pack a kick big enough to hold your animals where you want them. These are the safest of electric fence energizers with output energy limited to a fraction of the maximum allowed by law. JVA Energizers have patented AC/DC inverter technology which minimizes battery usage while increasing reliability.

# JVA MB Mid-Range Mains/Battery Operated Energizers for Portable Strip Grazing

The MB1.5, MB3 and MB4.5 Electric Fence Energizers deliver between 1.5 and 4.5 Joules output energy per pulse. Their innovative design means you can have versatile portable power from a 12V battery when needed, or run it from 120V mains electricity where that is available. Optional JVA Solar Kits and external batteries are available.



#### **JVA LED Energizer Range Features:**

- LED Energizer and fence status indicator
- > Large easy-to-use fence terminals
- > O-Ring sealed case for ant and moisture protection
- Lightning protection
- Battery leads with large easy-to-connect clips
- Front panel On/Off switch
- > Easy to mount on wall with 2 screws
- Approved to Safety Standards
- UV stable enclosure
- 2-year warranty.

	MB 1.5	MB 3	MB 4.5
Stored Joules	2J	4J	6J
Energy Output	1.5J	3J	4.5J
Power Consumption at 12.5Vdc	0.15A	0.3A	0.5A



	JVA PET	
Stored Joules	150mJ	
<b>Energy Output</b>	110mJ	

# JVA MB Mains/Battery High Powered LCD Energizers for Larger, More Permanent, Controlled Grazing Systems

The NEW MB8, MB12 and MB16 IP Energizers have 8, 12 and 16 Joules output energy respectively and can now be controlled from anywhere in the world using your mobile phone App. The energizers have an LCD display to show fence voltage and Stored Joules. All these newly styled energizers include an audible warning if there is a serious fault on the fence and Auto-Sync technology, all of which help keep your fences safe. These universal or Mains/Battery powered energizers give you the added option of running on 12V should you not always have 120V available.



**MB** 8

11J

8.1

0.9 A

**Stored Joules** 

**Energy Output** 

Power Consumption at 12.5Vdc

#### **JVA LCD Energizer Range Features:**

- Mains powered
- Battery powered
- Digital control
- Smooth Wave shape
- Power on demand
- LCD showing Kv and Stored Energy
- Ant and moisture protection
- UV stable enclosure
- Overload indication (Audible and Visible)
- Lightning protection
- > Reverse battery protection
- Self-resetting fuse
- Solar capability
- Low battery indication
- Over discharge battery protection
- Battery life maximization
- Battery voltage measurement
- Power adaptor included
- Audible alarm
- Bi-Polar output
- 2-year warranty.

MB 16

22J

16J

1.6 A

**MB 12** 

16J

12J

1.25 A

## **Strip Grazing Accessories**



**Value Reel** 

The heavy duty galvanized steel frame structure with glass fibre reinforced nylon bobbin makes this reel tough for the hardest conditions



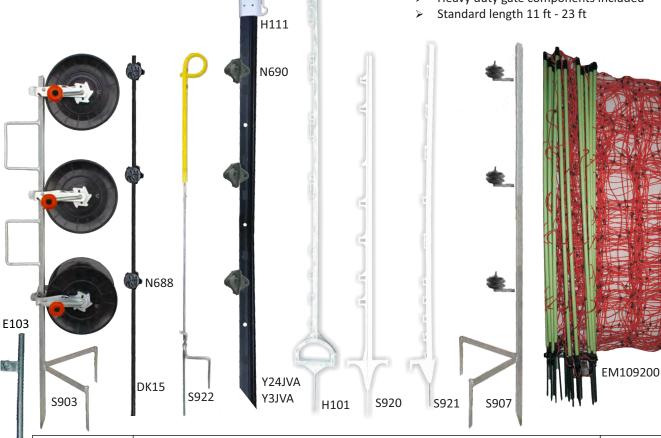
# JVA Volt Meter Fault Finder

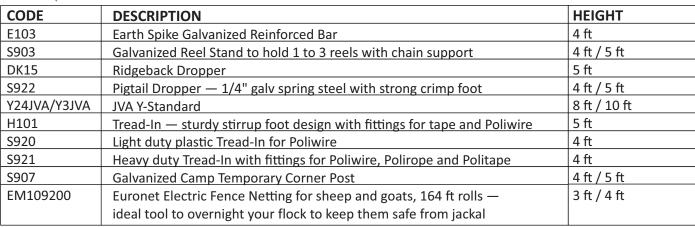
The JVA Fault Finder is a 3-in-1 tool designed specifically for the rapid location of faults on an electric fence line



Bungy Cord Gate Kit

- Consists of multi-stranded latex core and UV resistant sheath, for easy quick assembly of electric gates
- 4 stainless steel wires for maximum conductivity
- Wires cross over ten times per centimetre for maximum shock exposure
- Heavy duty gate components included





# **Strip Grazing Accessories**



centre pivot wheels through electrified fence camps

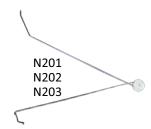


1/2" or 1 1/2" Tape Buckle

Used to attach tape to strainer insulator and in electric tape gates



Y-Standard **UV Stabilized Plastic** 



**Single Offset** Available in: 9" 14" and 18"



S912W S9110

#### **Poliwire**

An economic choice for temporary fencing, featuring stainless steel conductors and UV stabilized yarns; available in white or orange in 650 ft or 1640 ft rolls



#### 1- and 3-Way **Activator Plate**

Used in conjunction with end/corner strain and gate handle, to complete the current when the gate handle is connected

**Gate Spring** 

Galvanized Steel or

Powder-Coated White

Available in



#### **Heavy Duty** Compression **Gate Break Handle**

- > Strong robust body
- Positive non-slip grip
- ➤ High tensile, heavy-duty spring compresses under tension, preventing over stretching

N688

Screw-On Insulator

Can be attached at any

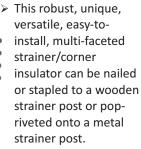
point along a dropper to

support an electric wire

Fully galvanized



and Corner **Strain Insulator** 



JVA Intermediate > It has 3-way straining capabilities and is ideal for corners and angles.



**Combi Tensioner** 

Hot Dipped Galvanized



**Maxi Tensioner** 

Strong Nylon quad securing tensioner



UGS

Nail-On **UV Stabilized Plastic** 

N210

N211

**Double Offset** 

Available in:

9" and 14"



**Plastic** Jumbo Strain

N212 N213

N217

**Triple Offset** 

and 14" straight or

Available in: 9"



**UV Stabilized Plastic** 

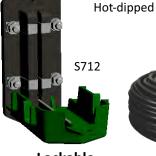


Lockable **Cut-Out Switch** 

A handy fence tool allowing the section of fence to be switched off for maintenance or fault finding



**Standard** Hot-dipped





HT Cable - Hard Available in: 375 ft 650 ft and 3280 ft





1/2" or 1 1/2" Politape

(1/2" wide/650 ft rolls) Ideal for temporary subdivision of camps or for the second strand on a permanent 1 1/2" tape fence



5/16" Polirope

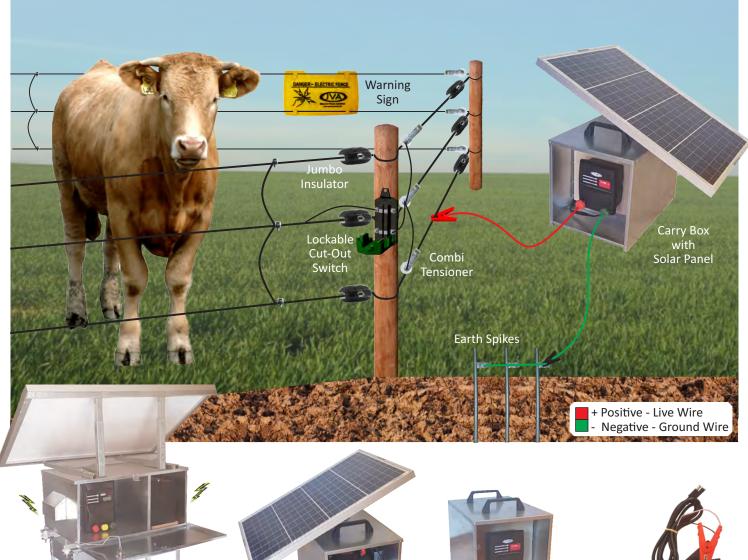
(5/16" wide/650 ft rolls) Polirope is also suitable for second stranding a 1 1/2" tape permanent fence for making electric gates



**High Strain Steel Wire** 

Full range available in Light or Double Galvanized 12 1/2gg 110lb 5410 ft

# **Strip Grazing Accessories**



**Shock Box with Top Solar Bracket** 

N410

This large permanent 'live' Energizer Station with space for a MBXL Energizer and up to 2 x 100 AH batteries.

#### N404 **Carry Box with Adjustable Bracket for Solar Panel**

The Galvanized Carry Box (N406) with the option of adjustable solar mounting (N404) offers a quick and easy set-up in the field for temporary fences. The MB Energizer and Battery is protected from the elements up to 50 Amp Hours but still easy to access and transport.

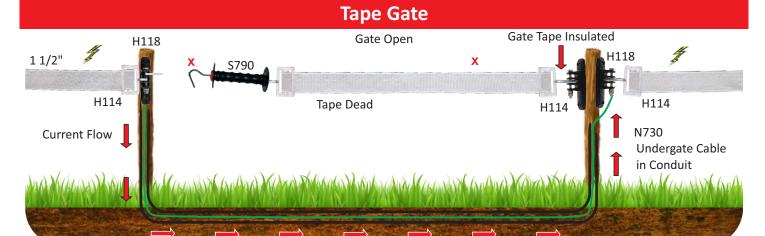


JCOX032

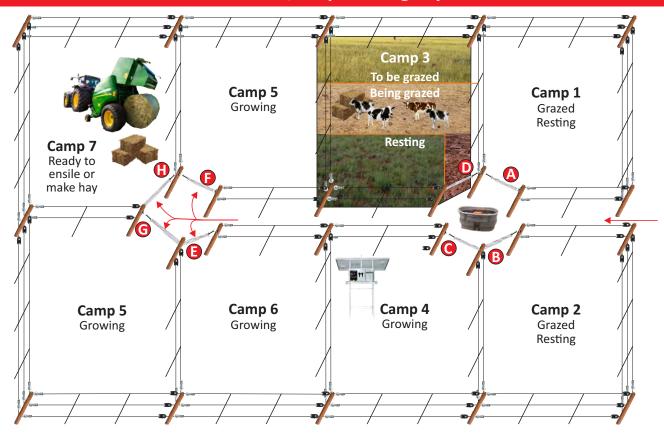
#### **Lead Joiner**

N406

These ready made 3 ft 3" Crocodile Lead Sets for easy connections and loopings.



# **Controlled/Strip Grazing Layout**



**Layout Explanation:** The area to be controlled/strip grazed is ring-fenced with a 3-strand permanent electric fence, or if already fenced with a conventional fence, an off-set wire can be attached to this fence. Internal camps are fenced with 2 strands of permanent electric fence. The area to be strip grazed then uses portable poliwire single strand fencing which simply taps off the subdividing electric fences. The whole system can be powered by a single high-powered JVA MB16 located in the center of the layout. Gate ways are spanned using spring/tape gates (A-H) for flexibility. Water troughs can be located in the center walkway.

Controlled grazing principles do not only apply to expensive planted irrigated pastures but can, and should, be applied to the grazing management of natural veld as well. Below are examples of high-density, quick rotation, grazing on natural pasturage (veld).



An evenly, well grazed, natural pasture (veld)

**Note:** No unpalatable tufts left



Sheep and cattle being intensively grazed in semi-desert conditions (Karoo/South Africa)

**Note:** (UHDQGS) Ultra High-Density Quick Grazing System



A camp recovering during the rest period

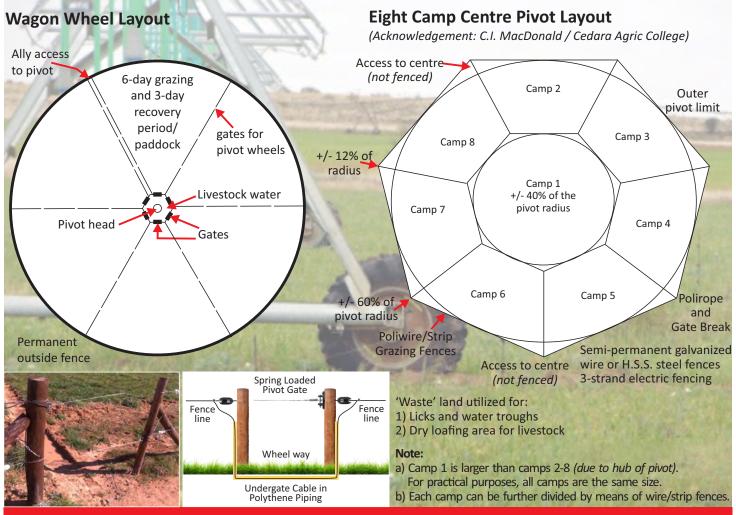
**Note:** Thickening of the tufts and better coverage



Animals ready to be moved onto un-grazed pasture

Note: Heavily grazed background & after a two-year rest
period, the lush growth in the foreground in this very dry area

## **Centre Pivot Layouts**

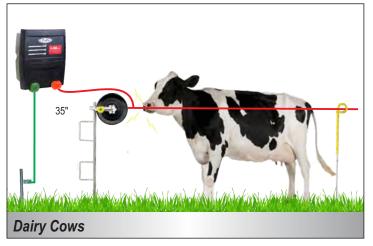


# **Strip Grazing Tips**

- > Try to position your energizer at the center of a large controlled grazing layout. This will reduce the load on the energizer and it will be able to power further.
- > Remember the rule of thumb and position the live wire of the fence at nose or shoulder height to the animals you wish to control. Also remember that all animals need to be trained to respect electric fences. Do not rush them, do not crowd them. Let them find out in their own time that the fence is hostile.
- > With difficult to control animals, or animals that might have lost their respect for electric fencing, pad-wipe the fence wire with diluted molasses to attract the animals to sniff the live wire. They'll soon relearn.
- > When cows are on young pasture with a high moisture content, they may scour (runny tummy), so it is advisable to let them have access to some good quality hay to increase the fiber content of their diet.
- > On young pasturage, especially if there is clover incorporated within the pasture, keep an eye open for bloat. Have some Bloat Guard Drench and a Trocar available for emergencies.
- > When winding up the poliwire of a strip grazing electric fence, first remove the wire from the insulators. This will prevent the 'cheese cutting' effect of the steel braids on the insulators and thus prolong their lifespan.
- > Then walk across the pasture winding up your poliwire as you go along. Standing in one place and winding often results in the wire snagging in the grass and jerking to release it will weaken the poliwire.
- > Poliwire products have a very high resistance and this will limit the distance one can do with this product.
- > Always back-fence when strip grazing to prevent the animals from grazing the regrowth and thus preserve root reserves.
- > Graze your pasture at the right stage of its growth cycle. Rank pasture is high in fiber and is therefore less nutritious. If you find the grass is getting away from you, rather start the grazing cycle again and make hay or silage with the grass that was in danger of becoming rank.
- ➤ Clean up the pasture that has been grazed by the milking herd by following up with dry cows or heifers. The pasture needs to be grazed off evenly for best results. Once grazed off move the followers on quickly so as to prevent any grazing of regrowth.
- > Do not forget the importance of good earthing, especially on larger controlled grazing systems.

# **Basic Strip Grazing Kits**

## When calculating a 1640 ft kit use red quantities and product descriptions.

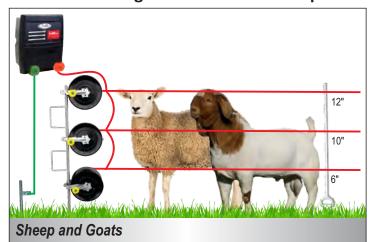


17"
Beef Cattle with Calves

QTY	Product	Unit Price	650 ft	1640 ft
1	Energizer			
1	Value Reel			
1	Poliwire 650 ft			
1	Poliwire 1640 ft			
20/50	Pigtail Tread-In			
1	Reel Stand			
1	Battery			
	ΤΟΤΔΙ			

QTY	Product	Unit Price	650 ft	1640 ft
1	Energizer			
2	Value Reel			
2	Poliwire 650 ft			
2	Poliwire 1640 ft			
20/50	Pigtail Tread-In			
1	Reel Stand			
1	Battery			
20/50	Screw-on Ins.			
	ΤΟΤΔΙ		•	

# When calculating a 1640 ft kit use red quantities and product descriptions / 1/2" see below





QTY	Product	Unit Price	650ft	1640ft
1	Energizer			
3	Value Reel			
3	Poliwire 650 ft			
3	Poliwire 1640 ft			
20/50	Multi Tread-In			
1	Reel Stand			
1	Battery			
	TOTAL			

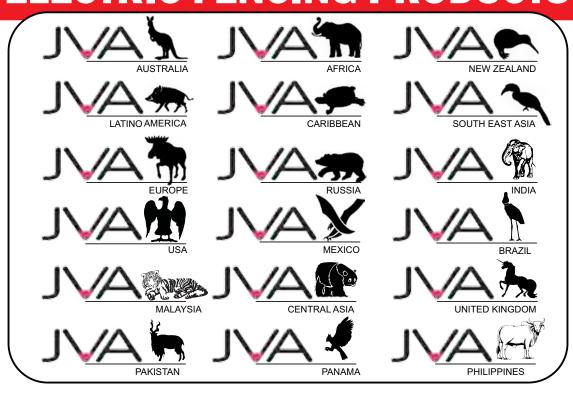
QTY	Product	<b>Unit Price</b>	650 ft	1310 ft
1	Energizer			
1	Value Reel			
1/2	Horse Tape 650 ft x 1 1/2"			
1/2	Politape 650 ft x 1/2"			
33/66	Horse Tread-In			
1	Reel Stand			
1	Battery			
	TOTAL			

**NB:** All animals need to be trained to respect an electric fence. Introduce them quietly and calmly. Do not rush them. Let them learn at their own pace that their new perimeter is hostile and can bite!

We hope that this brochure has been of assistance to you and for further information on strip grazing and costings please go to www.JVA-USA.com



# STRIP GRAZING ELECTRIC FENCING PRODUCTS





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