THE UNIVERSITY OF ARIZONA Cooperative Extension | THE UNIVERSITY OF ARIZONA Arizona Experiment Station | Natural Resources & the Environment

COMPARISON OF VF MANUFACTURERS

GALLAGHER

Halter

Nofence

VENCE

April 15th, 16th, and 17th 2025
Window Rock, Leupp, and Fruitland (Navajo Nation)

Flavie Audoin

INTRODUCTION

VF COMPANIES AVAILABLE IN 2025

CONCLUSION

Photo credit: Nofence

What is new?

- Snapshot of companies available in April 2025

  (always changing and evolving)

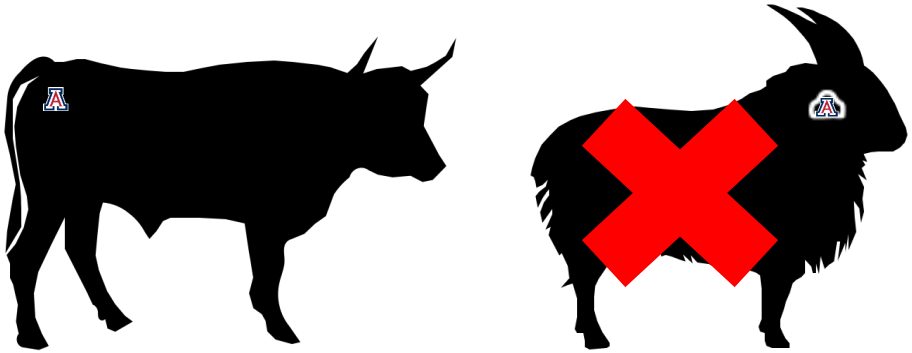
- No endorsement from the University, just presentation of the companies available

Photo credit: Nofence

Gallagher

- Also known as eShepherd neckbands
- New Zealand company
- VF neckbands available in the US since Spring 2024
- Only for cattle, no plan to work on small ruminants

Weight: 5.9 lbs



- Neckbands are purchased (warranty 3 years)
  ➔ deferred payment available
- Solar powered
  ➔ estimated to last for 7-10 years
- Base station: coverage of 2 to 4 miles radius

Photo credit: Gallagher

Gallagher

VF software

Available on computer and mobile

(cannot draw fences on phone)

Type of base station

Multiple base stations

OR

Cellular network

Herd size

No max

BUT

> 4 animals

Gallagher

Pasture size

No max

(min 45 ft x 45 ft)

Up front cost

$250-350/ neckband
(depends on number of neckbands)

$5,000-6,000/base station
(if necessary)

Yearly cost

Base station: $18/neckband

OR

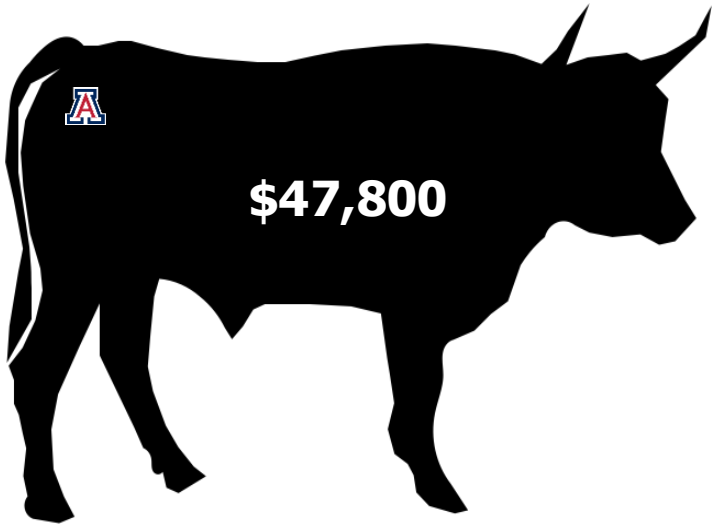
Cellular: $24/neckband

Gallagher

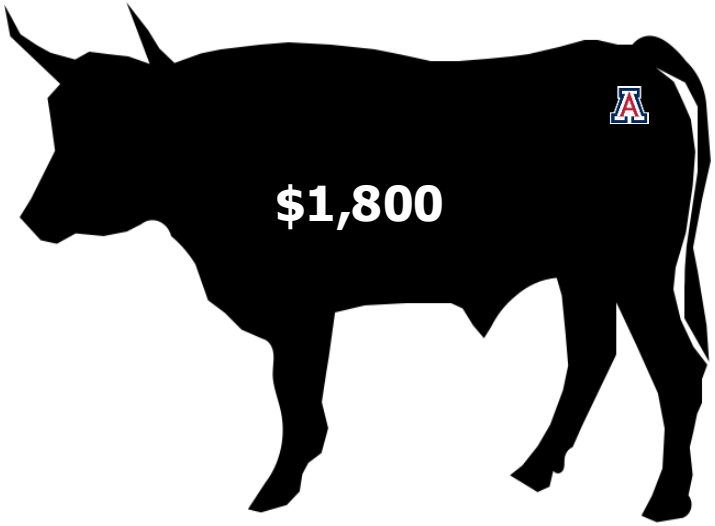
- **Scenario:** Rancher has 100 cows on 10,000 acres

- **Equipment:**
  - ➔ 4 base stations = (1 x $6,000) + (3 x $5,000) = $21,000
  - ➔ 100 neckbands = 100 x $250 = $25,000
    + $18/neckband/year = $1,800

1st year



Consecutive years



Cost for 5 years = $55,000 for 100 cows
So $550/cow/5 years or $110/cow/year

Gallagher

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  - ➔ 4 base stations = (1 x $6,000) + (3 x $5,000) = $21,000
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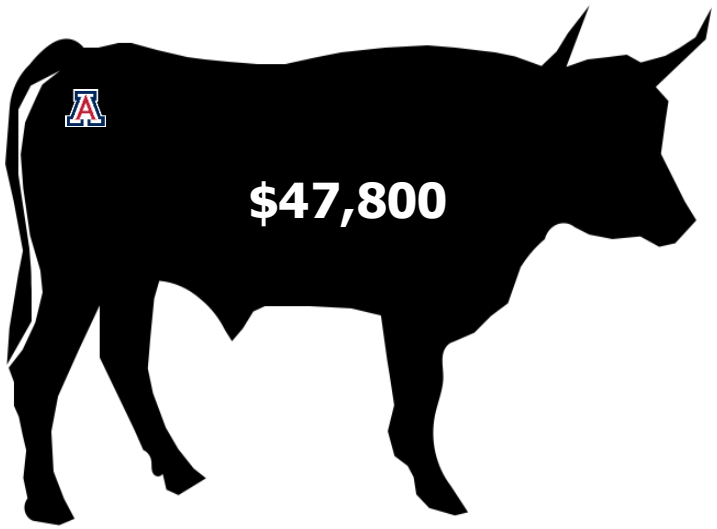
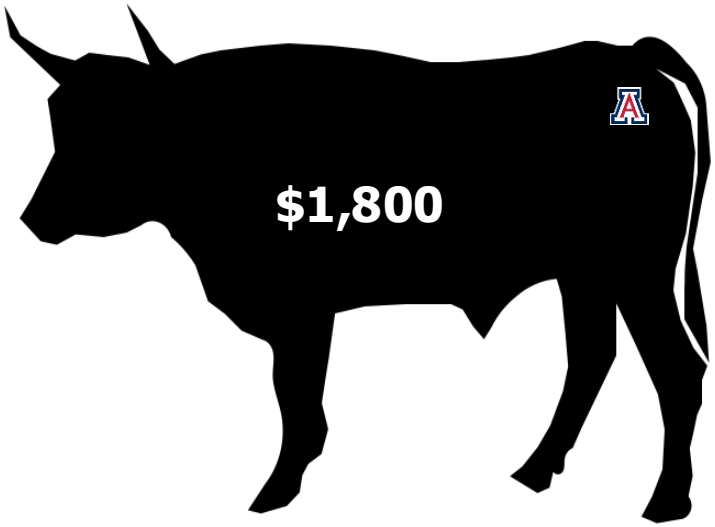


Consecutive years



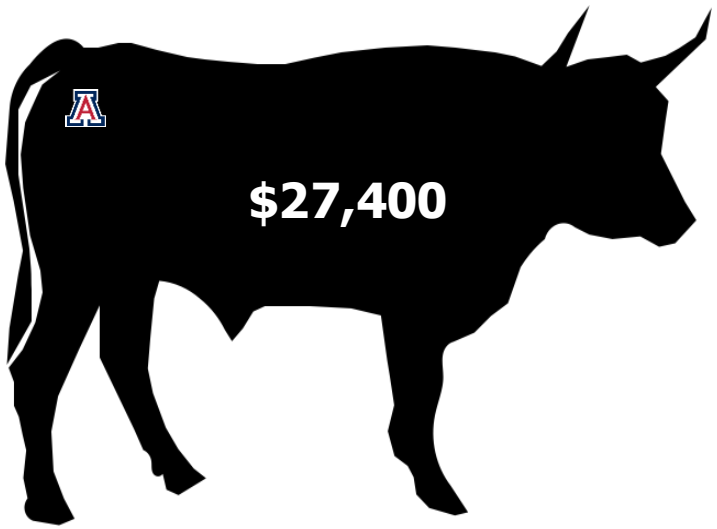
Cost for 10 years = $64,000 for 100 cows
So $640/cow/10 years or $64/cow/year

Gallagher

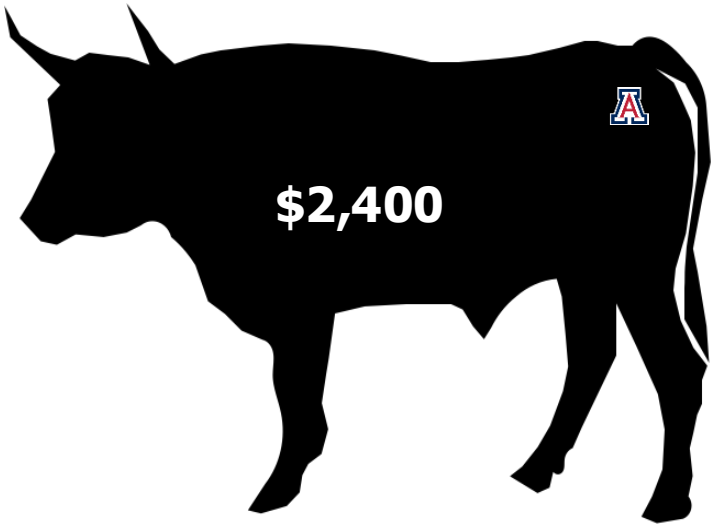
- **Scenario:** Rancher has 100 cows on 10,000 acres

- **Equipment:**
  - ➔ Cell service
  - ➔ 100 neckbands = 100 x $250 = $25,000
    + $24/collar/year = $2,400

1st year



Consecutive years



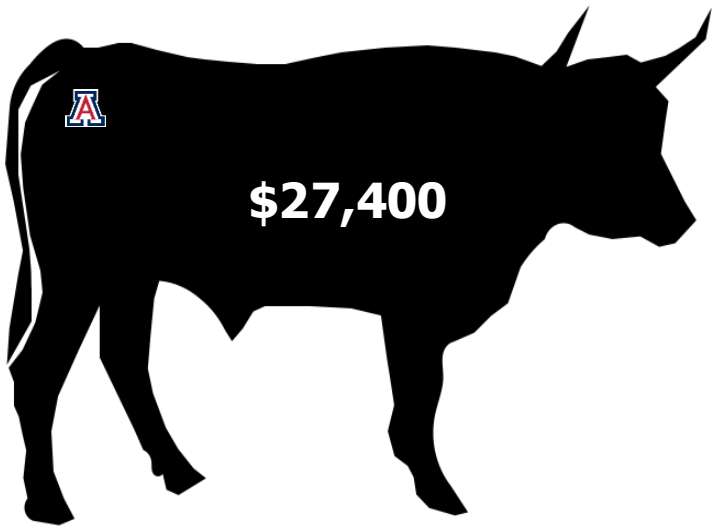
Cost for 5 years = $37,000 for 100 cows
So $370/cow/5 years or $74/cow/year

Gallagher

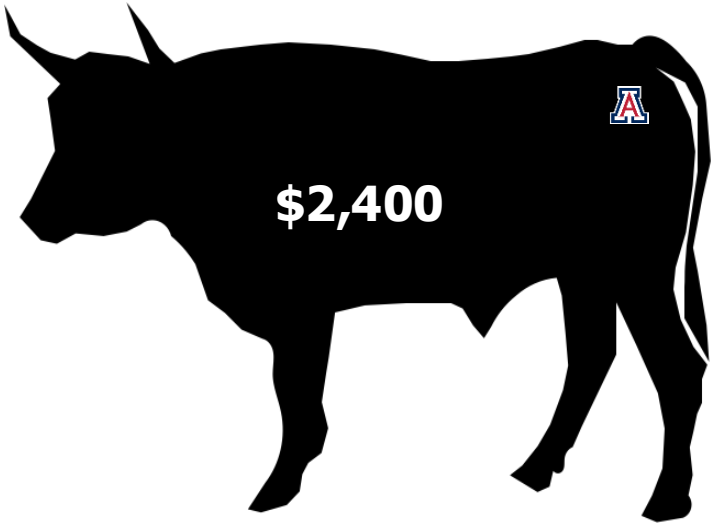
- **Scenario:** Rancher has 100 cows on 10,000 acres

- **Equipment:**
  - ➔ Cell service
  - ➔ 100 neckbands = 100 x $250 = $25,000
    + $24/collar/year = $2,400

1st year



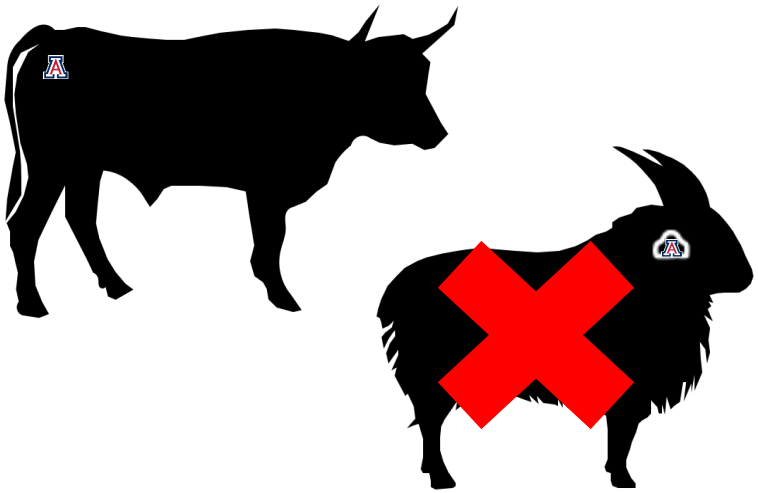
Consecutive years

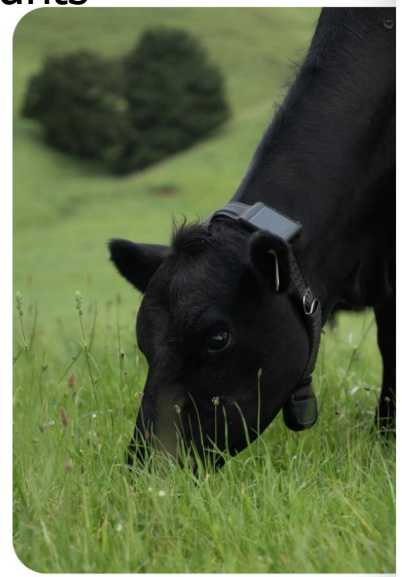


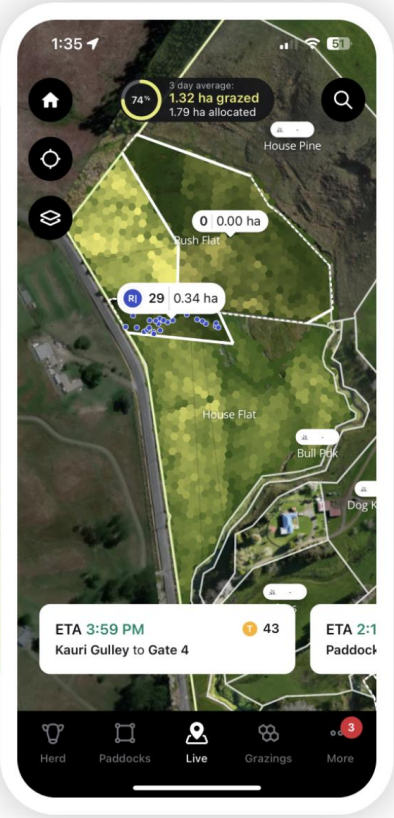
Cost for 10 years = $49,000 for 100 cows
So $490/cow/10 years or $49/cow/year

Halter

- New Zealand company
- VF collars available in the US since Summer 2024
- Only for cattle, no plan to work on small ruminants







- Collars are not purchased (36 - 48 months contract)
- Solar powered ➔ estimated to last for 5 years (lifetime warranty)
- Stimulation on left and right side, and vibration

Photo credit: Halter

Halter

- Collars can be put on animals over 8 months old
- Artificial Intelligence system

Weight: 2.7 lbs

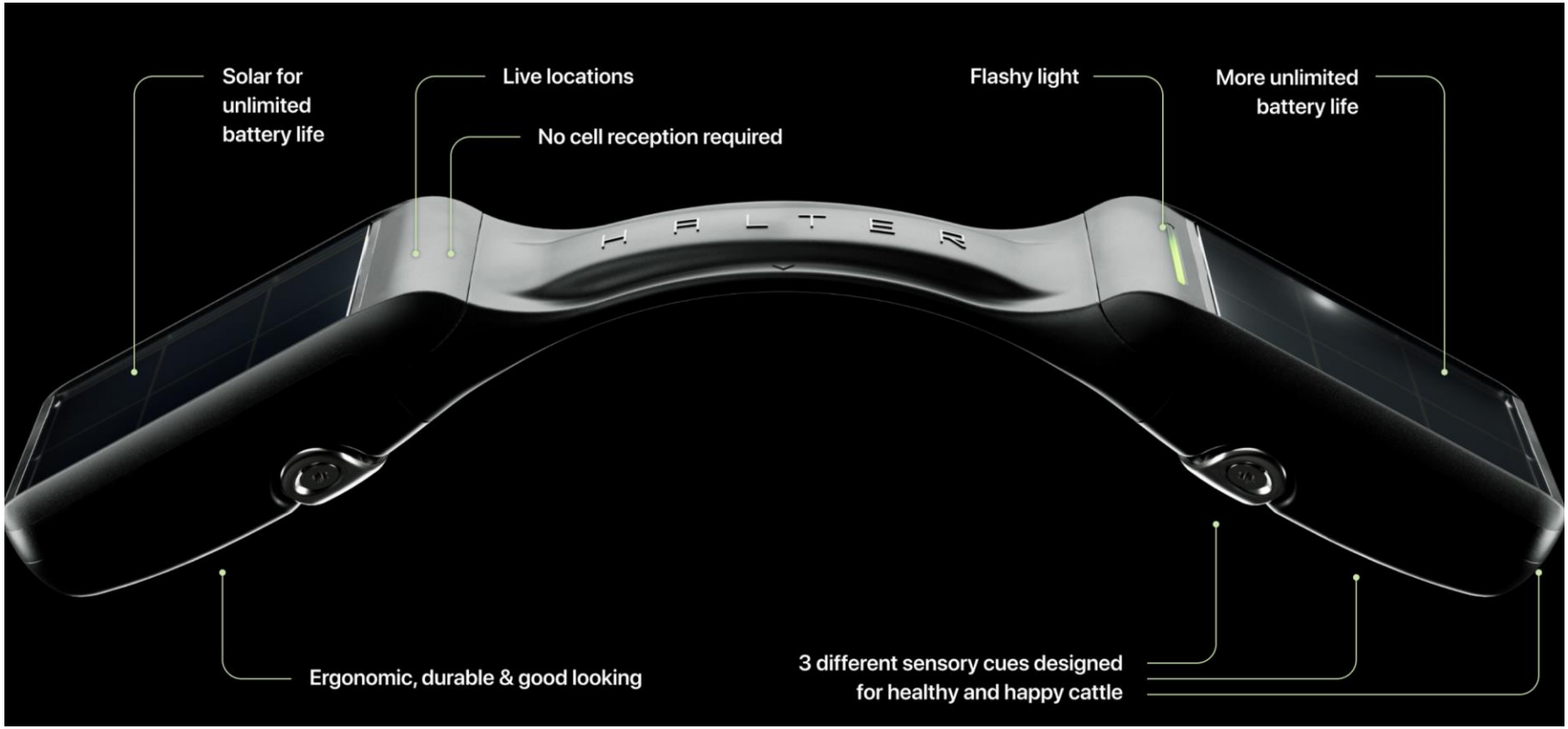


Photo credit: Halter

Halter

Halter

VF software

Available on mobile only

(app can work on iPad/tablet)

Type of base station

Multiple base stations

Herd size

No max

> 50 animals

Halter

Halter

Pasture size

No max

Up front cost

$4,500 per base station

Yearly cost

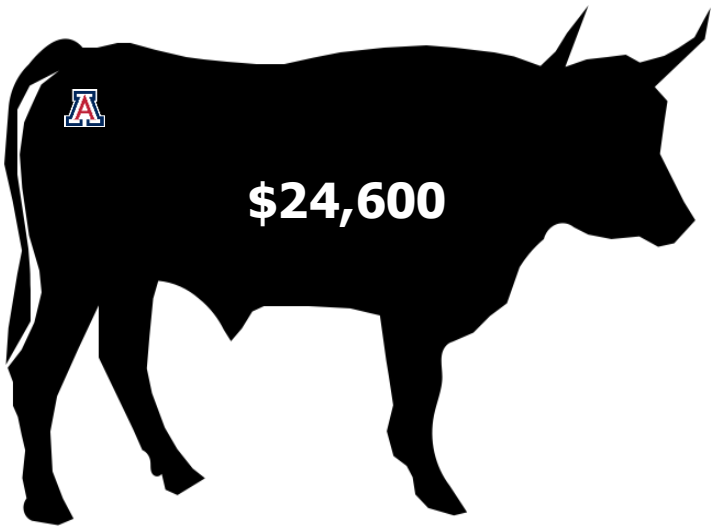
$66/collar

Halter

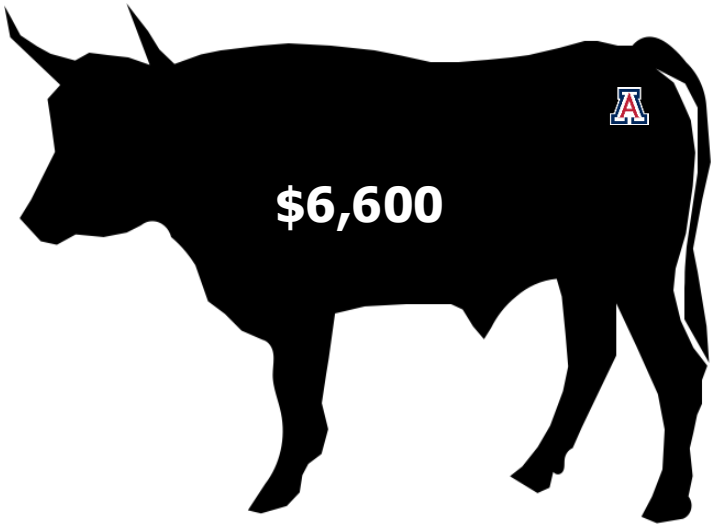
- **Scenario:** Rancher has 100 cows on 10,000 acres

- **Equipment:**
  - ➔ 4 base stations = 4 x $4,500 = $18,000
  - ➔ 100 collars = $66/collar/year = $6,600

1st year



Consecutive years



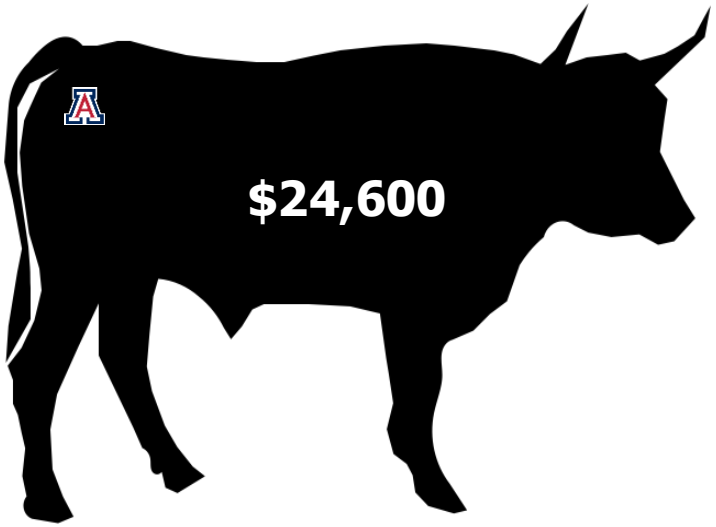
Cost for 5 years = $51,000 for 100 cows
So $510/cow/5 years or $102/cow/year

Halter

- **Scenario:** Rancher has 100 cows on 10,000 acres

- **Equipment:**
  - ➔ 4 base stations = 4 x $4,500 = $18,000
  - ➔ 100 collars = $66/collar/year = $6,600

1st year

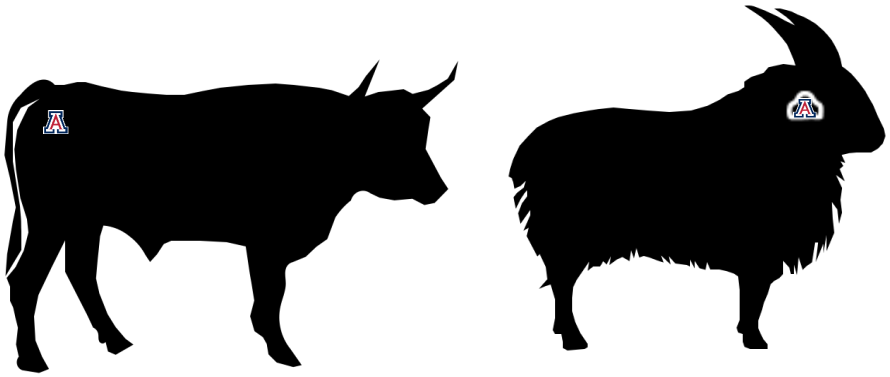


Consecutive years

Cost for 10 years = $84,000 for 100 cows
So $840/cow/10 years or $84/cow/year

Nofence

- Norwegian company
- VF collars available in the US since Spring 2024
- For cattle and small ruminants



- Collars are purchased (warranty 5 years)
- Solar powered
  ➔ estimated to last for 5-10 years

Weight: 3.2 lbs (cattle)
1.1 lbs (sheep/goats)

Photo credit: Nofence

Nofence

VF software

Available on computer and mobile

(Nofence app)

Type of base station

Cellular network

Herd size

5 – 200 animals

Nofence

Nofence

Up to ~10,000 ac

(min ½ acre)

Up front cost

$289/collar for cows

OR

$199/collar for sheep/goats

Yearly cost

<50 animals
$56 → $52/collar

OR

>50 animals
$42 → $36/collar

Nofence

- **Scenario:** Rancher has 100 cows on 10,000 acres

- **Equipment:**
  - ➔ Cell service
  - ➔ 100 collars = 100 x $289 = $28,900
    + $42/collar/year = $4,200 and $36/collar/year = $3,600 after 12 months
  - ➔ 10 Chargers = $590 and 5 spare batteries = $445

1st year

Consecutive years

Cost for 5 years = $48,535 for 100 cows
So $485/cow/5 years or $97/cow/year

Nofence

- **Scenario:** Rancher has 100 cows on 10,000 acres

- **Equipment:**
  - ➔ Cell service
  - ➔ 100 collars = 100 x $289 = $28,900
  + $42/collar/year = $4,200 and $36/collar/year = $3,600 after 12 months
  - ➔ 10 Chargers = $590 and 5 spare batteries = $445

1st year

Consecutive years

Cost for 10 years = $66,535 for 100 cows
So $665/cow/10 years or $67/cow/year

Nofence

	First 12 months	After 12 months
	Starts when collars are delivered. Initial 12 month fixed plan	Usage based, invoiced monthly. Flexible plan
Under 50 collars	$56.00 Per Collar, for the 12 month period	$6.50 Per Collar, per Month for* each collar in use.
Above 50 collars 100 Sheep & Goat Collars 200 Collars in total	$42.00 Per Collar, for the 12 month period	$4.50 Per Collar, per Month for* each collar in use.

$36 maximum per billing period
* If used more than 8 months, the next 4 months in your 12 month billing period is free of charge.

	First 12 months	After 12 months
	Starts when collars are delivered. Initial 12 month fixed plan	Usage based, invoiced monthly. Flexible plan
Under 50 collars	$56.00 Per Collar, for the 12 month period	$6.50 Per Collar, per Month for* each collar in use
Above 50 collars 100 Cattle Collars 200 Collars in total	$42.00 Per collar, for the 12 month period	$4.50 Per Collar, per Month for* each collar in use

$36 maximum per billing period
* If used more than 8 months, the next 4 months in your 12 month billing period is free of charge.

➔ After 12 months, you only pay for 8 months of subscription per collar

Nofence

- **Longer chains**
  - ➔ Cattle: $15 per pair of chain, up to ~20 inches
    $18 per pair of chain, up to ~27 inches
  - ➔ Sheep & Goats: $9 per pair of chain - 9 links
    $10 per pair of chain - 13 links

- **Shelter beacons for inside barns or shelters**
  - ➔ every 250 square feet, with minimum of 2 ($22 per beacon for each species)

- **Spare batteries and chargers**
  - ➔ **Cattle:** charger = $59 and batterie = $89
  - ➔ **Sheep and goats:** charger = $39 and batterie = $49 – Battery tool = $5

Nofence

- **Scenario:** Rancher has 100 sheep or goats on 10,000 acres

- **Equipment:**
  - ➔ Cell service
  - ➔ 100 collars = 100 x $199 = $19,900
  + $42/collar/year = $4,200 and $36/collar/year = $3,600 after 12 months
  - ➔ 10 Chargers = $390 and 10 spare batteries = $490

1st year

Consecutive years

Cost for 5 years = $39,380 for 100 sheep or goats
So $394/sheep or goat/5 years or $79/sheep or goat/year

Nofence

- **Scenario:** Rancher has 100 sheep or goats on 10,000 acres

- **Equipment:**
  - ➔ Cell service
  - ➔ 100 collars = 100 x $199 = $19,900
  + $42/collar/year = $4,200 and $36/collar/year = $3,600 after 12 months
  - ➔ 10 Chargers = $390 and 10 spare batteries = $490

1st year

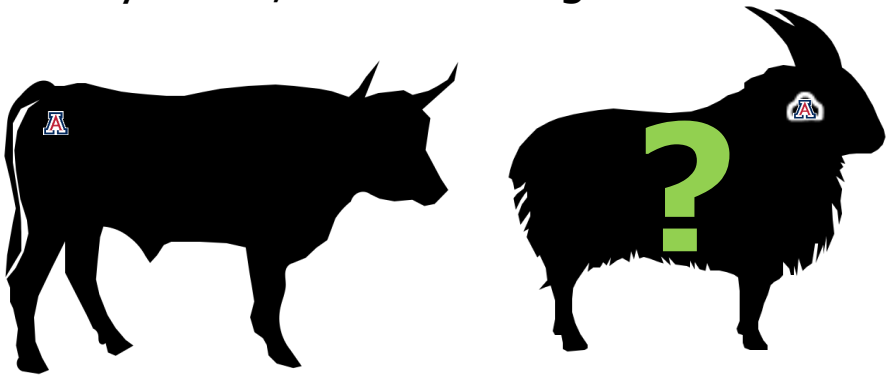
Consecutive years

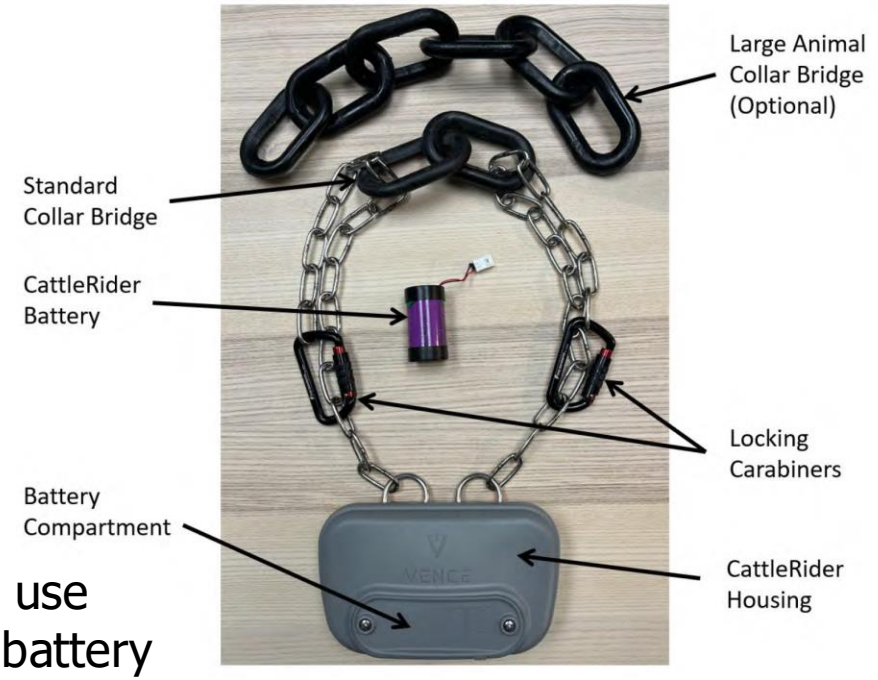
Cost for 10 years = $57,380 for 100 sheep or goats
So $574/sheep or goat/10 years or $57/sheep or goat/year

Vence

- American company, Merck Animal Health
- VF collars available in the US since 2021
- Only cattle, but are doing some research on other species

Weight: 2.5 lbs





- Collars are leased
- Not solar powered
  - ➔ single-use battery estimated to last 6 to 9 months depending on use
  - ➔ new design goal to increase life battery
- Base station: optimal coverage up to 15 km radius (~ 9 miles)

Photo credit: Vence

Vence

VENCE

VF software

HerdManager from computer

(not mobile friendly)

Type of base station

Multiple base stations

Herd size

No min

and

No max

Vence

VENCE

Pasture size

No max

(min 200 ac)

Up front cost

Pro installation
$12,500/station

OR

Self installation
$10,000/station

Yearly cost

$40/collar

AND

$10/battery

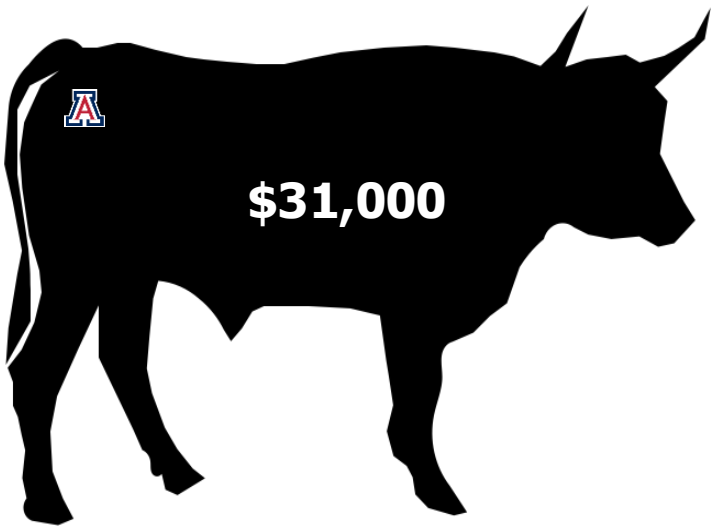
(2 batteries per year)

Vence

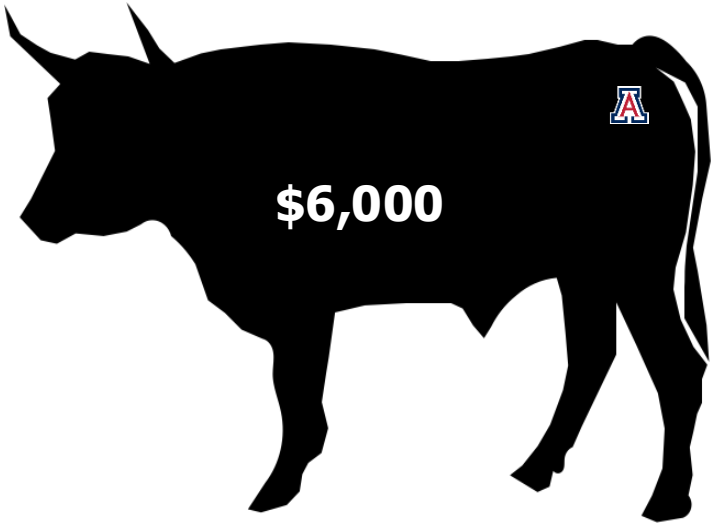
- **Scenario:** Rancher has 100 cows on 10,000 acres

- **Equipment:**
  - ➔ 2 base stations with pro installation = 2 x $12,500 = $25,000
  - ➔ 100 collars = 100 x $40 = $4,000
  - ➔ 200 batteries = 200 x $10 = $2,000

1st year



Consecutive years



Cost for 5 years = $55,000 for 100 cows
So $550/cow/5 years or $110/cow/year

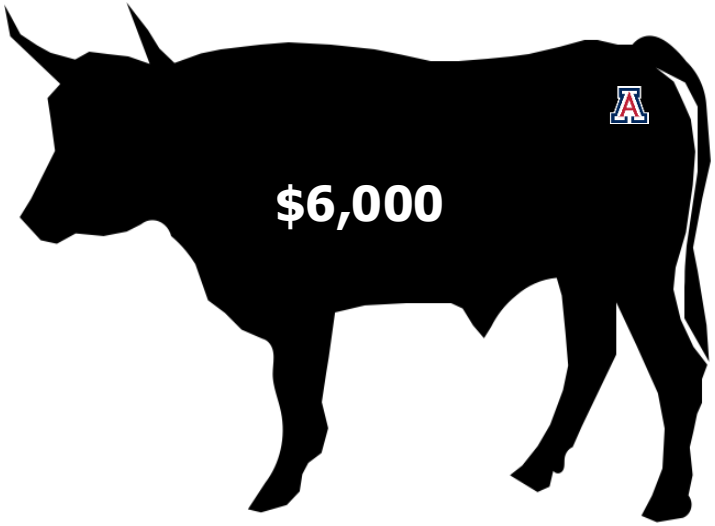
Vence

- **Scenario:** Rancher has 100 cows on 10,000 acres

- **Equipment:**
  - ➔ 2 base stations with pro installation = 2 x $12,500 = $25,000
  - ➔ 100 collars = 100 x $40 = $4,000
  - ➔ 200 batteries = 200 x $10 = $2,000

1st year

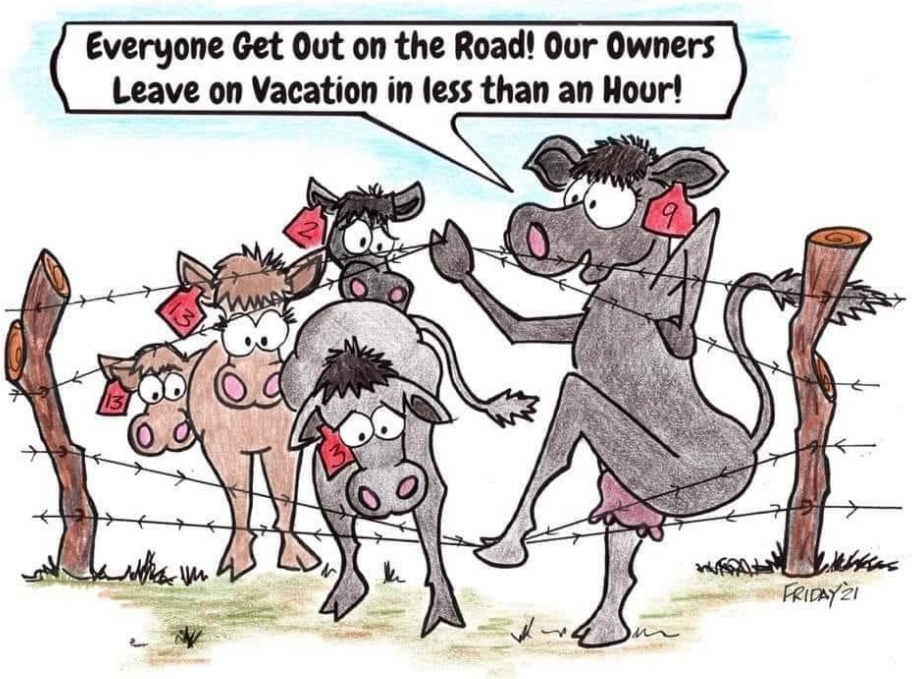
Consecutive years



Cost for 10 years = $85,000 for 100 cows
So $850/cow/10 years or $85/cow/year

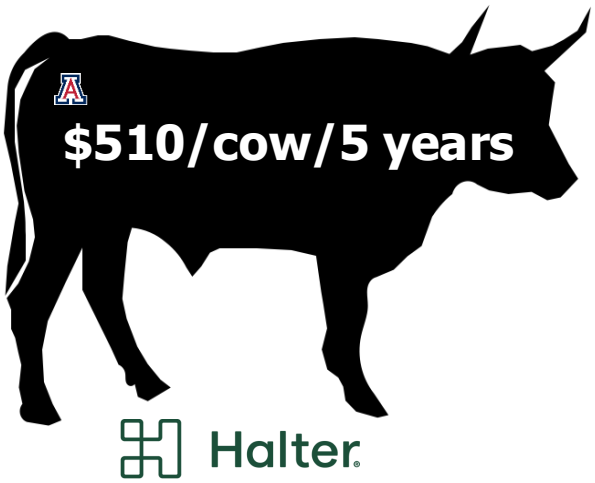
If you are interested in VF, you should ask yourself these questions:

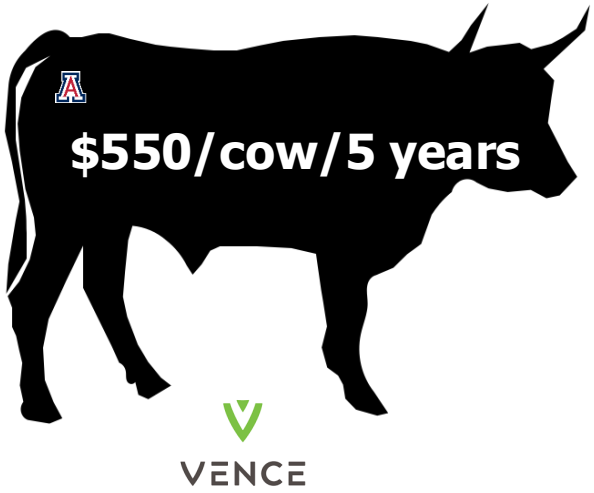
- What are my objectives and goals with using this technology?
- Am I going to use the technology all year around or not?
- Am I going to use the technology on private land and/or public lands?
- Is it worth it to my operation to purchase VF technology?
- Do I have good cell coverage or not?
- Do I want to change batteries or not?

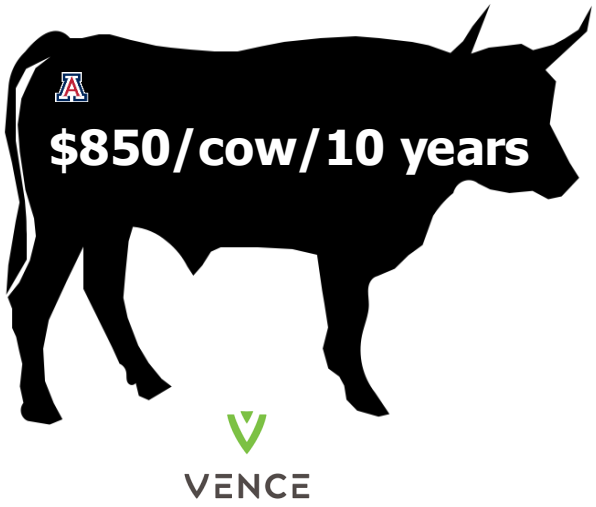


Base stations (price comparison)

$ → $$$







Cell service (price comparison)

$

$$$

COST SHOULD NOT BE THE ONLY DECISION MAKER

GALLAGHER

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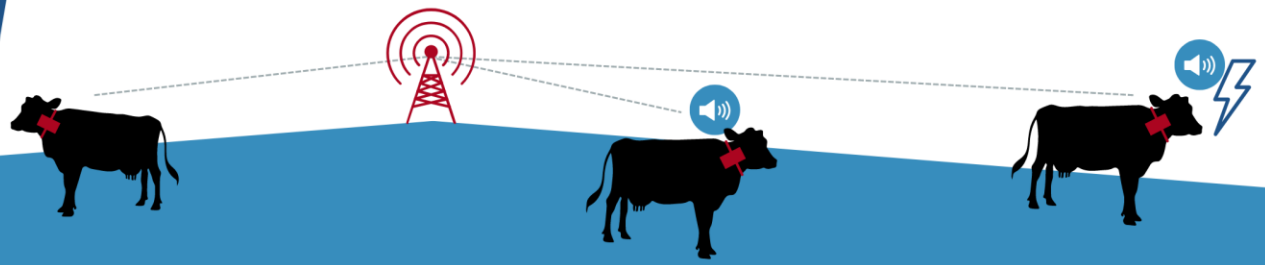

rangelandsgateway.org/virtual-fence

Thank you

Any Questions?

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