

Dartguns Remote Drug Delivery (RDDD) In Clinical Practice

Feedlot Management School

Saskatoon Sask Feb 12th

By Roy Lewis DVM



Roy Lewis Bio

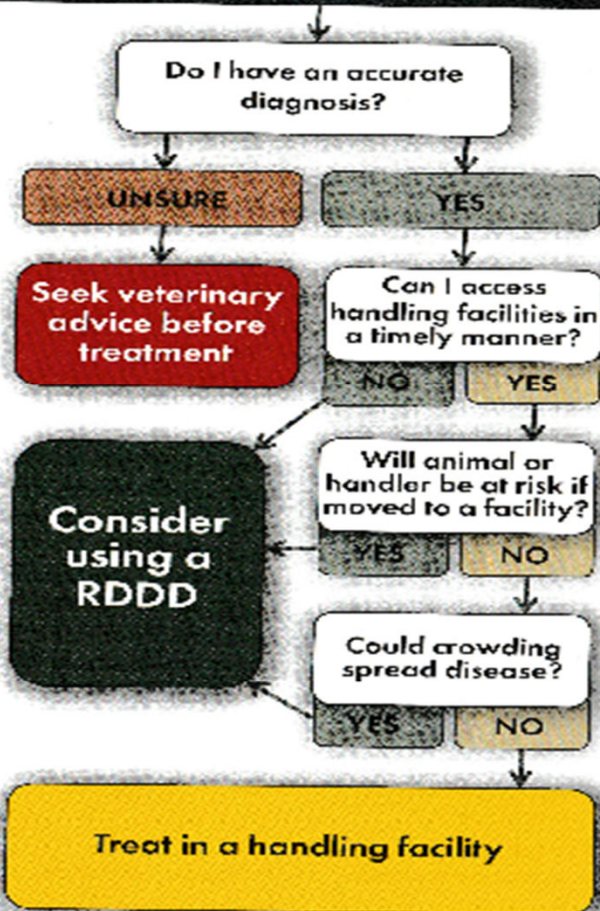
- Roy Lewis DVM 1981 WCVM
- 1981-2012 Westlock Veterinary Center
- Focused on beef herd health and reproduction
- Large Animal practice 5%-10 bison & any species “chuteable”
- Owned up to 70 Bison cows
- Worked for the pharma industry Merck Animal Health Jan 2012-May 2020
- Part of Family Owned Purebred Cattle (Simmental & Angus) Grain & Potatoes (Lewis Farms)
- Always a good day when working with cattle or bison

Veterinarians Involvement & Responsibility

- Dartguns (RDD) are here to stay need to use wisely.
- Maximizing Safety (training) in usage and dart placement.
- Help with Animal Welfare for bison/cattle and producer
- Must use wisely following BQA VBP+ Guidelines
- Avoid Residues (Both meat from antimicrobials and metal)
- VBP+ Producers Must Record ID and Product Used.
- Collar may stay in. (foreign body) Biodegradable collar



When is Remote Drug Delivery Appropriate?

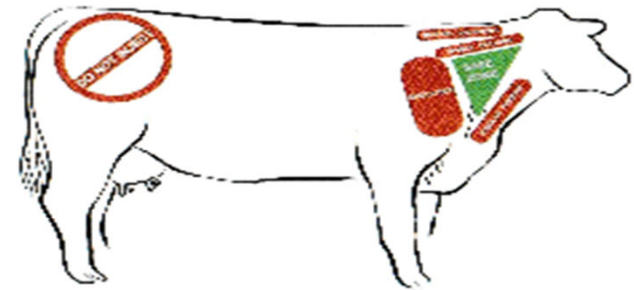


Scan for more RDDD resources, including a 4-minute video.



Find more practical, science-based information for beef cattle producers at BeefResearch.ca.

Remote Drug Delivery Devices (RDDD)



 **BCRC**
BEEF CATTLE RESEARCH COUNCIL OF CANADA

**WHEN & HOW TO
TREAT BEEF CATTLE
USING a RDDD**



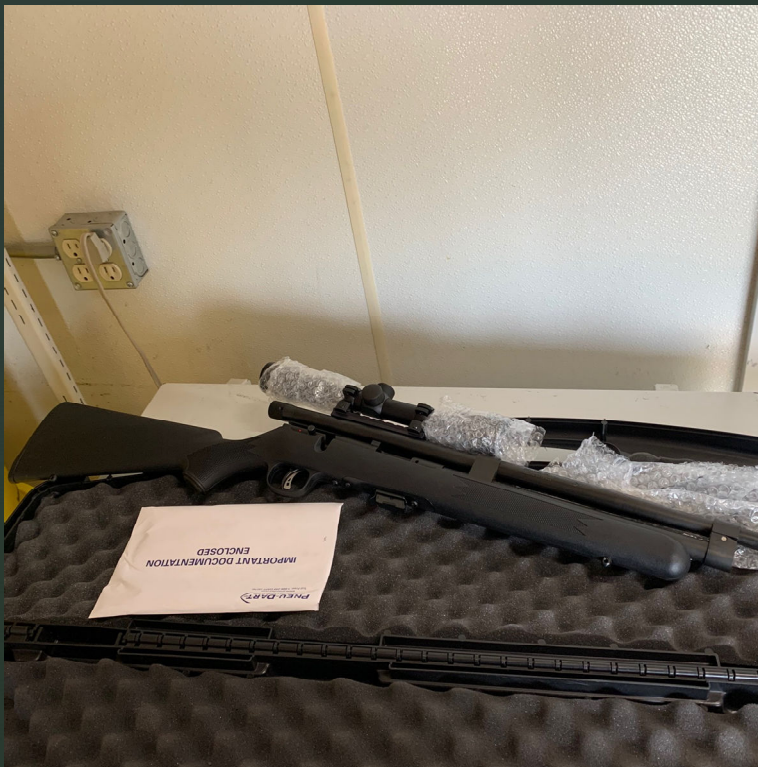
98% sold as 1/2 needles to go S.C.
Sask Distributor 2019 30,000 packs
1 pack=5 darts(150,000 darts)





Safety First for Operator and Intended
Target Practise Makes perfect
Crossbows large volume darts not
desirable.

Pneu Dart Scope vs Sights Holographic Sights



Pros of Usage

- Convenience (Less labour)
- Darting much easier skill than roping.
- Earliest treatment (treated from tractor, quad horse or feed truck!!)
- Safety of both cattle & producer/veterinarian (ie treating bulls)
- Less Stress (animal welfare) Not roping and choking down
- Most time gets in right location
- 98% of sales ½ inch to get s.c.
- ¾ inch cows and bulls .
- Never seen a broken dart with pneu-dart
- **Odd report of dart in the US embedded in the musculature These make headlines!**
- Can see broken needles with the Dan-inject system. Another Dart system.
- Single use dart with Pneu Dart
- Use with tranquilizers



Canadian Pneu Dart Distributors Veterinary Clinics & Farm Supply Stores 50/50 Split

Central Alberta Ag Supply is the Canadian Distributor for Pneu-Dart. Please see the map to find Pneu-Dart Dealers across Canada.

For questions about Pneu-Dart please call our office and we will be happy to help you.

1 | Dougan's Farm & Feed Supply
403-638-3959
1015 Main Ave E
Sundress's, AB T0M 1X0

2 | Battlefords Animal Hospital
306-446-8387
11204 Railway Ave E. #7A
North Battleford, SK S9A 2R7

3 | East Angle Breeding Center Ltd.
403-362-3296
728-2 Ave E.
Brooks, AB T1R 1B5

4 | Hackman Feeds
306786-7713
385 5th Ave N
Yorktown, SK S3n2Z9

5 | Keddies Tack & Western Wear
780-532-4888
9808-132 Ave
Grand Prairie, AB T8V 4J6

6 | Park Range Veterinary Services
306-764-6998
380A S Industrial Dr
Prince Albert, SK S6V 7Ys

7 | Peace River Building Products
250-785-2116
9511-85th Ave
Fort St John, BC V1J 6M5

8 | Sunny South Vet Clinic
403-327-2425
1118-41St N
Lethbridge, AB T1H 5M1

9 | Total Farm Supply Ltd.
204-727-3276
1530-18 St N
Brandon, MB R7C 1A6

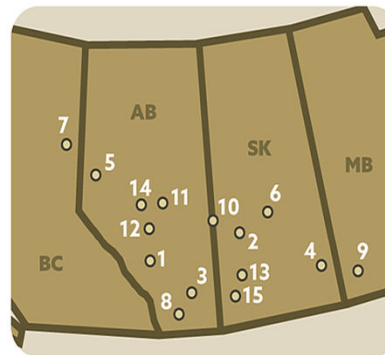
10 | Weir Veterinary Services
780-875-2281
5603-44St
Lloydminster, AB T9V 0B2

11 | Westlock Vet Centre
780-349-3663
10004-94a Ave
Westlock, AB T7P 2M9

12 | Winfield Feed & Farm Supply
780-682-2493
Main St
Winfield, AB T0C 2X0

13 | Hooves & Paws Vet
306-278-2252
116 Main St
Elrose, SK S0L 0Z0

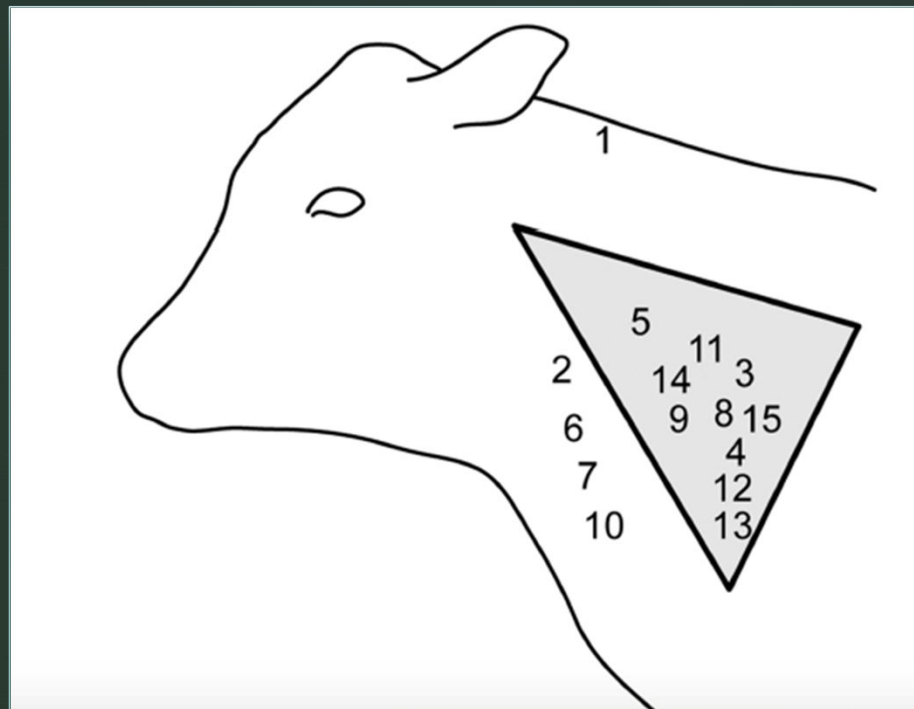
14 | Barr North Vet Services
780-674-2100
6302 49 St
Barrhead, AB T7N 1A3



Screenshot

Accuracy of Darting

- 5/15 missed their mark
- All still S.C. if $\frac{1}{2}$ inch needle
- Scope increases accuracy
- Loss of some darts in the environment
- 90% of guns now sold with scopes .
Holographic sites so easy to use.



Articles on Pros and Cons

- Doc Talk Dr. Dan Thomson Doc Talks 422
- Some training videos web sites.
- www.pneudart.com
- in USA 70% of cattle producers use a remote delivery system
- Location & Residues.
- BCRC in @2023 Survey, Brochure
- QR code leading to the 4 minute video
- Video Available on BCRC Website along with many other factual stuff .
- Dr John Campbell Podcast on Dart Usage


Taking aim at dart gun pros and cons

Effective yes, but they need to be used with the proper diagnosis and product

By **Roy Lewis Dvm**
Contributor

Published: July 26, 2017
Cow-Calf, Livestock

Reading Time: 4 minutes



You don't need a firearms safety course to use a dart gun, but it's a good idea if you've never handled a gun. Photo: Thinkstock

Remote drug del... Screenshot ... videos are becoming more...

Dart guns may do more harm than good

By **Dr. Joyce Van Donkersgoed**

Published: January 30, 2009
Vet advice
Be the first to comment

Occasionally cattle get sick on pasture and we have to treat them. They may have pinkeye, foot rot, pneumonia or some other ailment that requires individual treatment. Since the cattle are out on grass, and handling facilities are usually not close by, there are only a few options for treatment. If the disease is a herd problem, sometimes we can medicate the water or mineral supplement.

However, the conditions that are usually being treated on summer pasture are problems in the muscle or under the skin. This must be treated by injection in the muscle or under the skin. This requires either moving the sick animal to a handling facility and treating in the chute or roping the animal and treating it.

One other option exists, and that is the use of treatment prods or dart guns, including crossbows. Various products are on the market, and they include syringes and...

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A [video](#) from [Century About It](#) checking out [Van Marolles Jr](#) [Vandou Grass](#)

▶ Mitigating Risks With RDDDs

- Try and Shoot from 10-30 ft
- Shoot from as close to 90 degrees as you can
- Make a decent distance exam first.
- Consider everything you use
Extra label!!!
- Maintain your gun
- Watch expiry date of darts.
- Waxy collar dries out and falls off so there is an expiry date

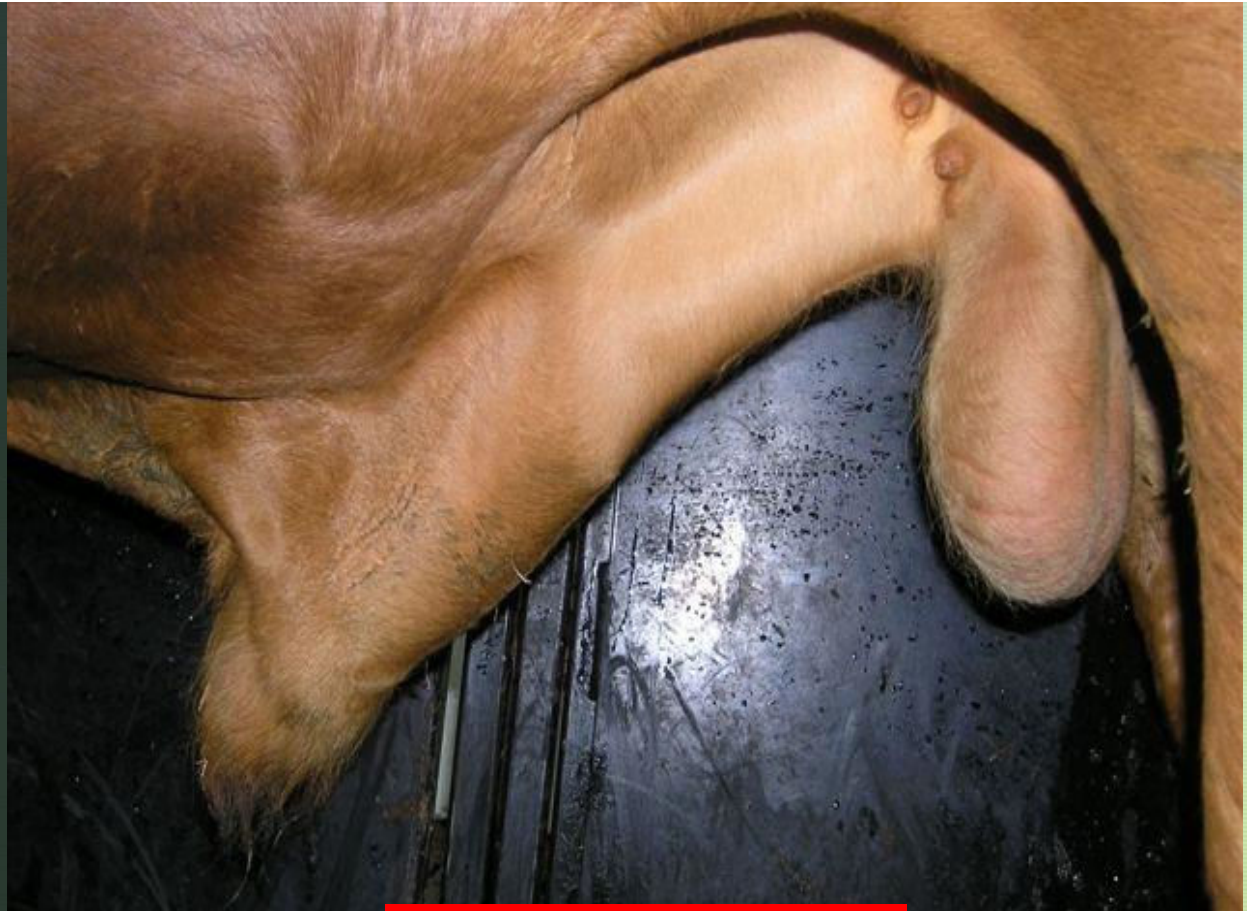
Cons of Dart Usage

- Right Diagnosis (Footrot) Distance Exam
- Product not given by right route IM vs SC
- Muscle damage and inappropriate location. Volume
- Withdrawal times altered!!
- Safety muscle damage hit scapula,
- Could go IV (never been reported to date)
- Cost of equipment.
- Often using high category antimicrobials because low dosage, long acting (doesn't follow prudent usage guidelines).
- Beef Quality Assurance
- Darts left in muscle (can happen if charge too high very very rare)
- May not get ID of animal records VBP+ in field or feedlot??
- Use binoculars and go on





**Frostbite Scrotum
Fertility Unknown**



**Lacerated Prepuce
Good prognosis 70-80% with
Time.**

Cons of Usage # 2

- Underdosing NOT discharging fully
- 4/15 Coetze et al 2018
- 3/15 Rivera et al 2019
- Using products absolutely should not be given this way
- Micotil (safety for both operator and cattle (given IV by mistake) Elanco doesn't want it given in a RDDD
- Excede given not even close to the label. Not to be given SC or IM period other than base of ear.
- drug residues
- Metal residues darts left in muscle (very very rare)



Tips to Darting

- Make sure clinical diagnosis is correct and it is truly necessary to dart.
- Don't over- power the dart.
- Check to make sure fully discharged when retrieve.
- Use neck and try and avoid butt muscles
- ½ inch dart all that is necessary except big bulls.
- Record on medical records which ones have been treated.





• Thank
You &
The End