

Southland Elk/Wapiti Advance Party

Benefits of Leptospirosis Control

- **Jim Cameron**
- **Murray Hagen**
- **Dave Lawrence**



Background: Connemara Wapiti

- A 330 ha breeding, finishing and velvet Wapiti stud farm near Manapouri.
- Stock
 - 870 cows (including 100 R2s)
 - 360 bulls (including 30 MA sires and 30 R3 for sale)
 - 1000 weaners (including brought in animals)
- Wintering policy of cows
 - R2s on pasture
 - R3s and R4s on one self feed silage pad
 - MA cows spread over two silage pads

The Challenge

- Struggle to get good reproductive performance in 1st and 2nd calving cows
- Already gained some improvement by:
 - Wintering separately to older animals
 - Boosting young cow condition in the autumn with lucerne and deer nuts
 - Autumn drenching of young cows
- But average weaning percentages still in low-mid 80's.

Leptospirosis Project

A lepto vaccination trial was undertaken at Connemara, stimulated by;

- National survey; 75% NZ deer herds infected (2009)
- Massey uni study showing reproductive and weight gain benefits of lepto control
- Other members of our AP already gaining benefits from vaccinating

Leptospirosis Project

- **Method**

- Half of a mob of 170 R2 and R3 cows were vaccinated before mating and half unvaccinated

- **Results: Weaning Percentage**

- Non vaccinated: 87%
- Vaccinated: 93%

- **Results: Weaning weight of offspring**

- Non vaccinated: 72kg average
- Vaccinated: 76 kg average

Cost Benefit of Vaccination

- Improved weaning percentage:
 - 6% increase = 5 more calves from the 85
COWS
 - 5 calves x \$420 = **\$2100**
- Better weaning weight:
 - 79 calves x 4kg x \$5.50 = **\$1740**
- Labour and vaccine costs
 - **\$170**
- **Nett Benefit = \$3670 (per 85 cows)**

And don't forget....

- Leptospirosis infects humans too.



- Farmers and others in the agricultural industry at higher risk
- What's the value of prevention of human disease??

Questions?

