



EpiCentre

OIE Collaborating Centre for
Veterinary Epidemiology
and Public Health



Control of leptospirosis in livestock



Emilie Vallée & Massey Leptospirosis Research Group

Leptospirosis: an occupational disease
6/3/17

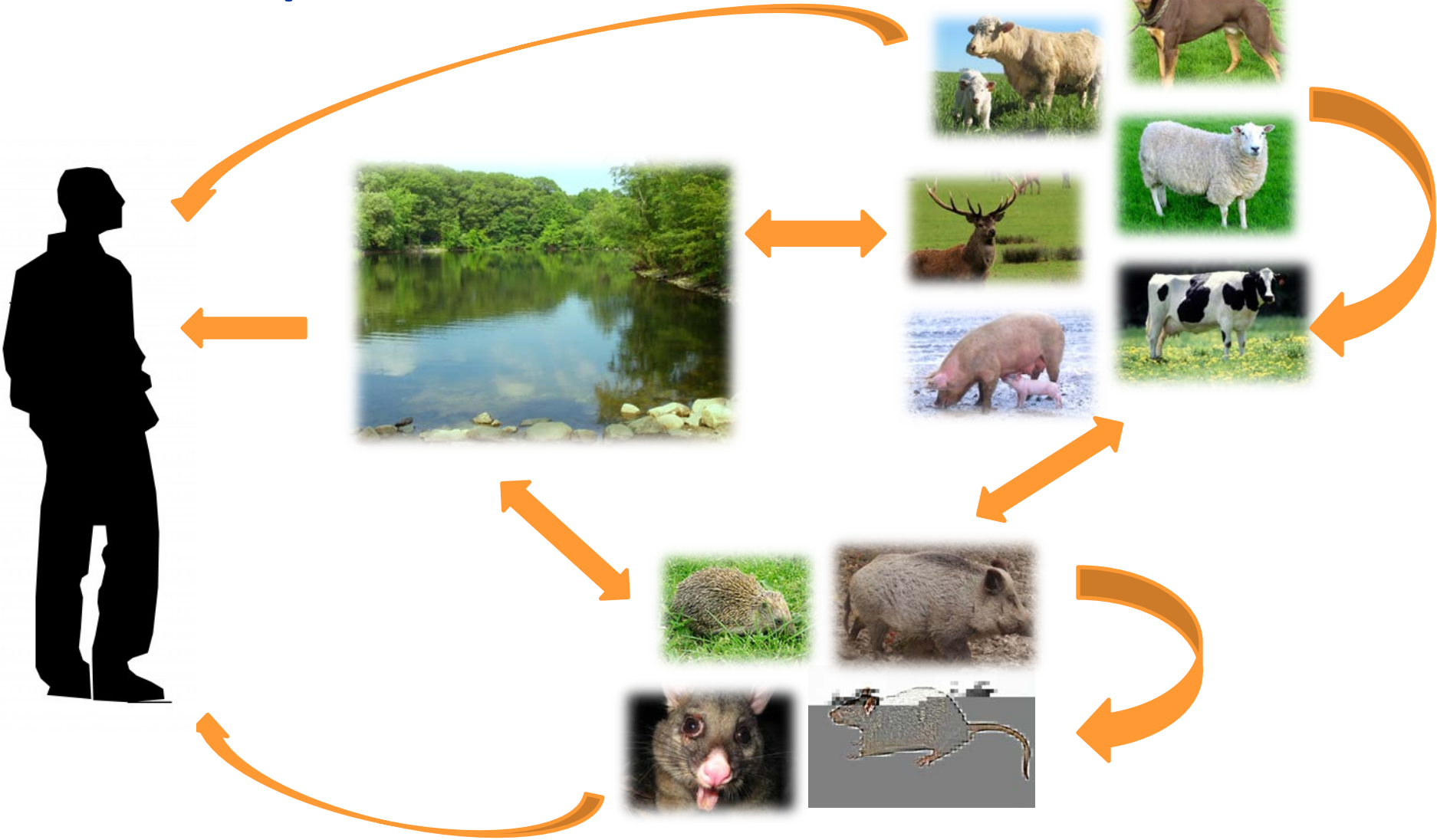
EpiCentre



ivabs

EpiCentre.massey.ac.nz

Complex disease



WHAT ARE WE TRYING TO ACHIEVE?

Protect the livestock?

- Hardjo and Pomona



Likely no loss



Possibly abortion



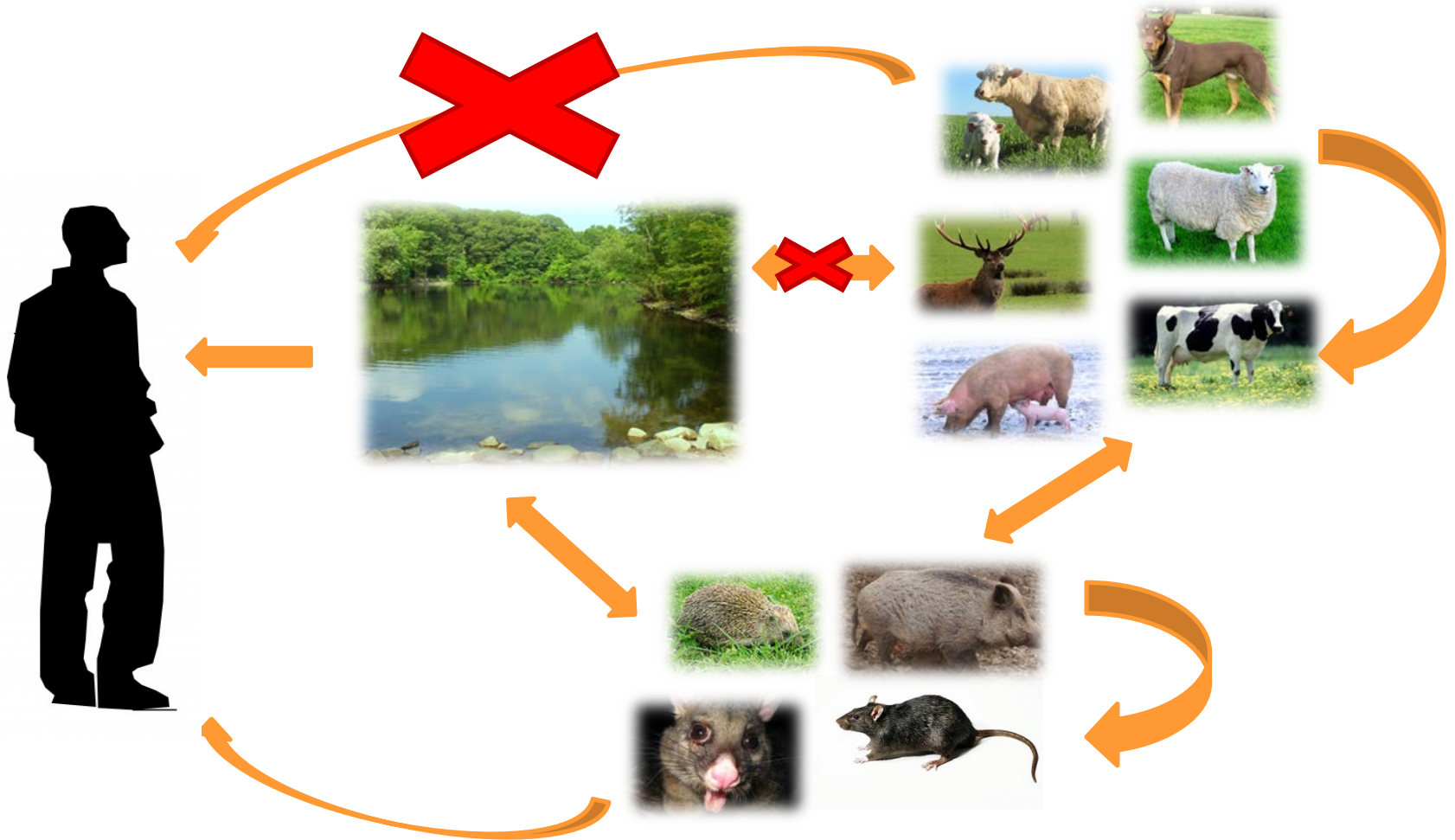
Reduced weaning rate
Reduced growth rate



Possible reduced milk
production

- Other serovars?

Protect humans



HOW?

We will build a great, great wall



And we'll make the livestock pay for it

Strategies

- ~~Eradication~~
- ~~Culling of infected animals~~
- Awareness
- Risk management
 - Protective equipment
 - Biosecurity
- Vaccination!



Vaccination works!

- Meta-analysis (cattle & deer, J. Sanhueza)
 - **71-89% protection**
- Effectiveness in sheep
 - **100% protection**
 - Even when schedule not optimal
- Dairy (Y. Yupiana)

Vaccination works!... But...

- Serovar-specific
 - Currently 3 (out of 6) in the vaccine
- **TIMING** is key
 - Not too early (maternal immunity)
 - Not too late (before exposure)



Leptosure®

- NZVA & Dairy cattle vets initiative
 - Reduce human leptospirosis on dairy farms
- Working plan between dairy farmer and veterinarian
- Risk identification and management



So?

- Know your risks!
- Vaccinate
 - More serovars?

