Knowledge exchange for control of Johne's Disease

This farm has a commercial dairy herd with around 320 high yielding milking cows.

They have an all-year round calving system that uses year-round housing.

Johne's has been a problem for many years. Between 2005 and 2008 the farm used to vaccinate against the disease.



Milking cow housing Wash-through system

The wash-through system uses recycled water which may be contributing to the continuing problem.



Snatched calves Dry cow housing

Dry cows are housed in groups to keep the cows least likely to be infected away from the suspicious animals.

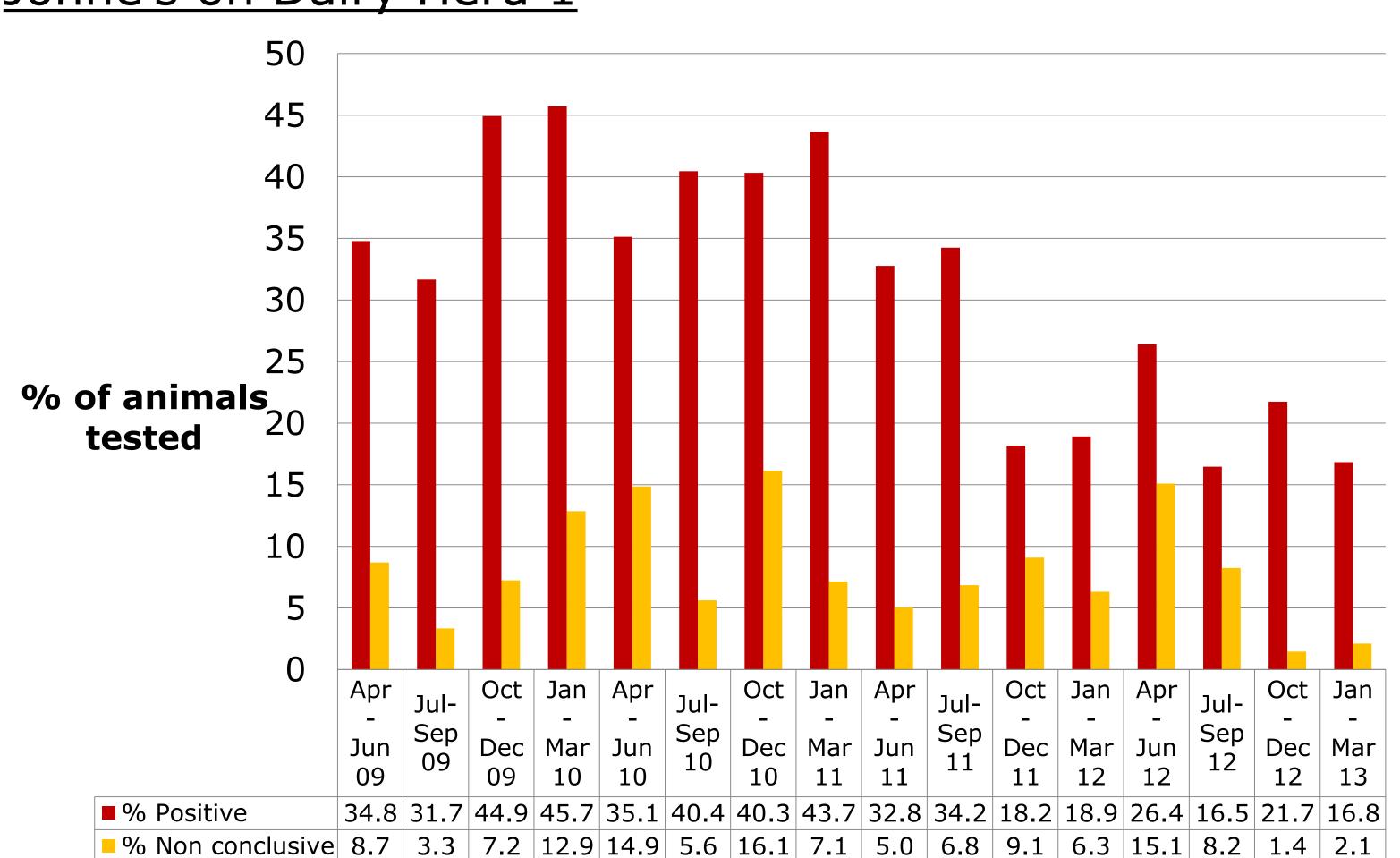
Calves are snatched as soon after birth as possible.



Loafing area

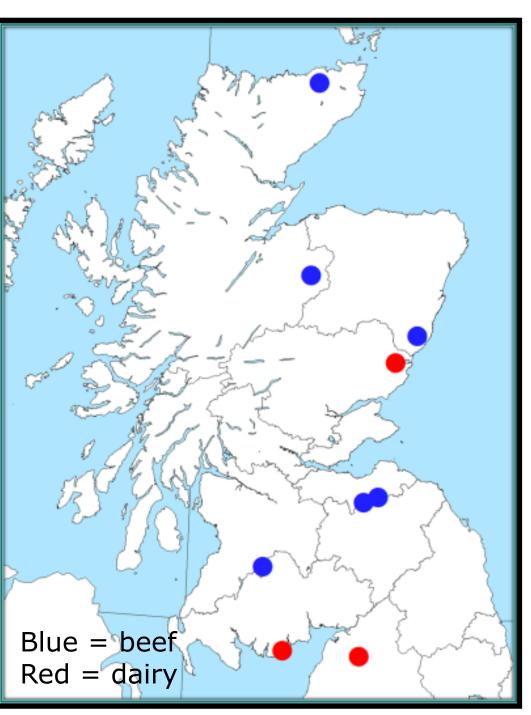
Liming at mucking out.

Johne's on Dairy Herd 1



DAIRY FARM 1, NORTH EAST

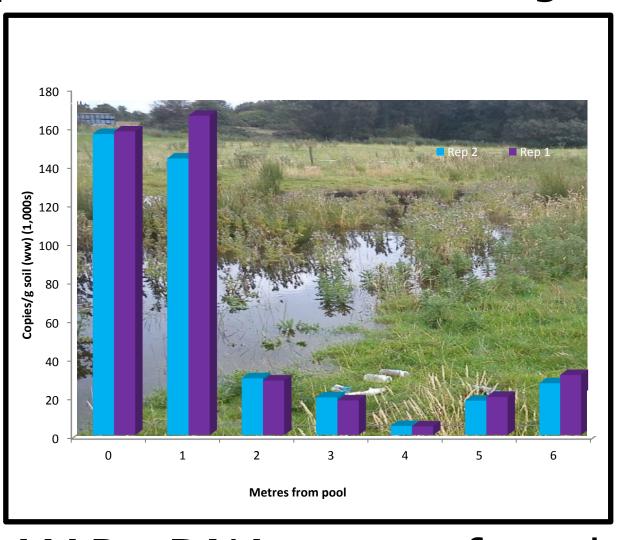


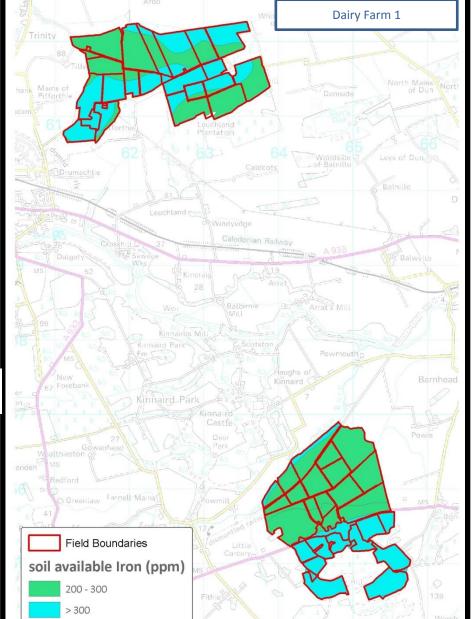


Environmental factors

Evidence suggests that soil environmental factors play a role in the persistence of *Mycobacterium avium paratuberculosis* (MAP).

Sample sites were selected according to soil parameters and farming activity.





MAP DNA was found only in one soil and one water sample, at the same site.

Samples from the other three sites were negative. Indications were that MAP presence decreased away from the standing water (see graph).

Post-mortem samples

			His	topath	ology
Serum ELISA		+	?	_	Total
	+	6	1	13	20
	?	0	0	0	0
	_	0	2	44	46
	Total	6	3	57	66

This suggests that this dairy herd still has active Johne's infection as well as retaining the confounding vaccination interference.

Johne's on Dairy Herd 1

The history of vaccination has made interpretation of the tests tricky.

Cows are removed from the herd when it is believed an ELISA positive result is not due to the vaccine.

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