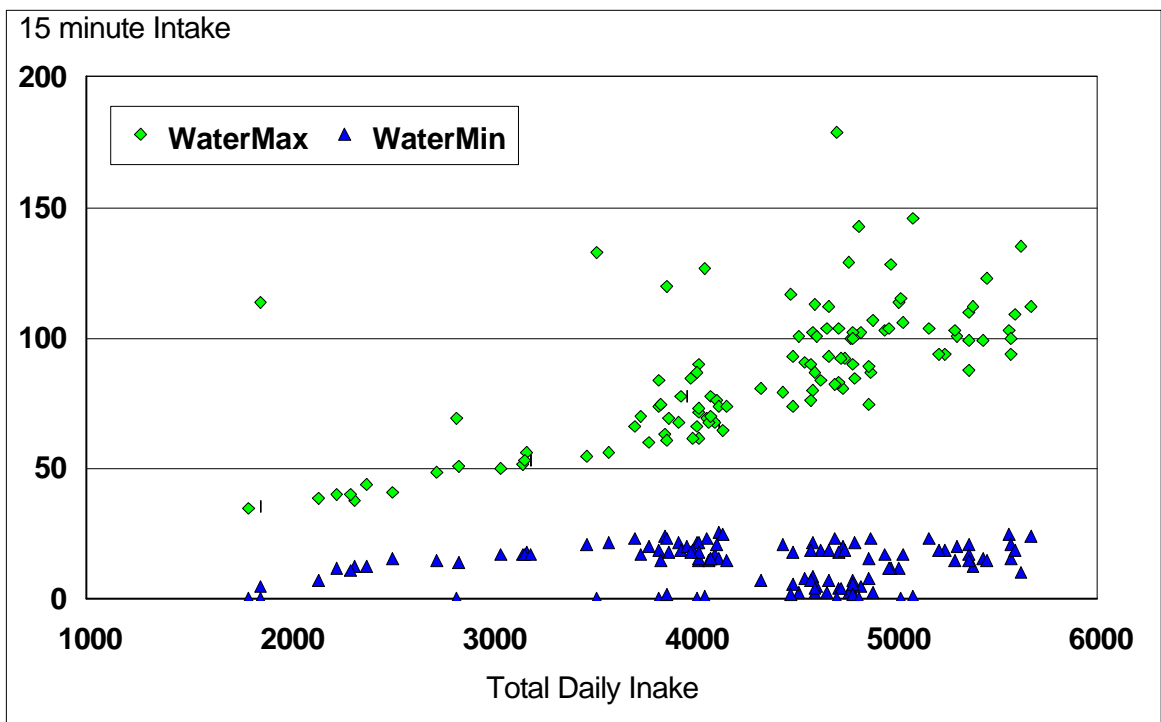
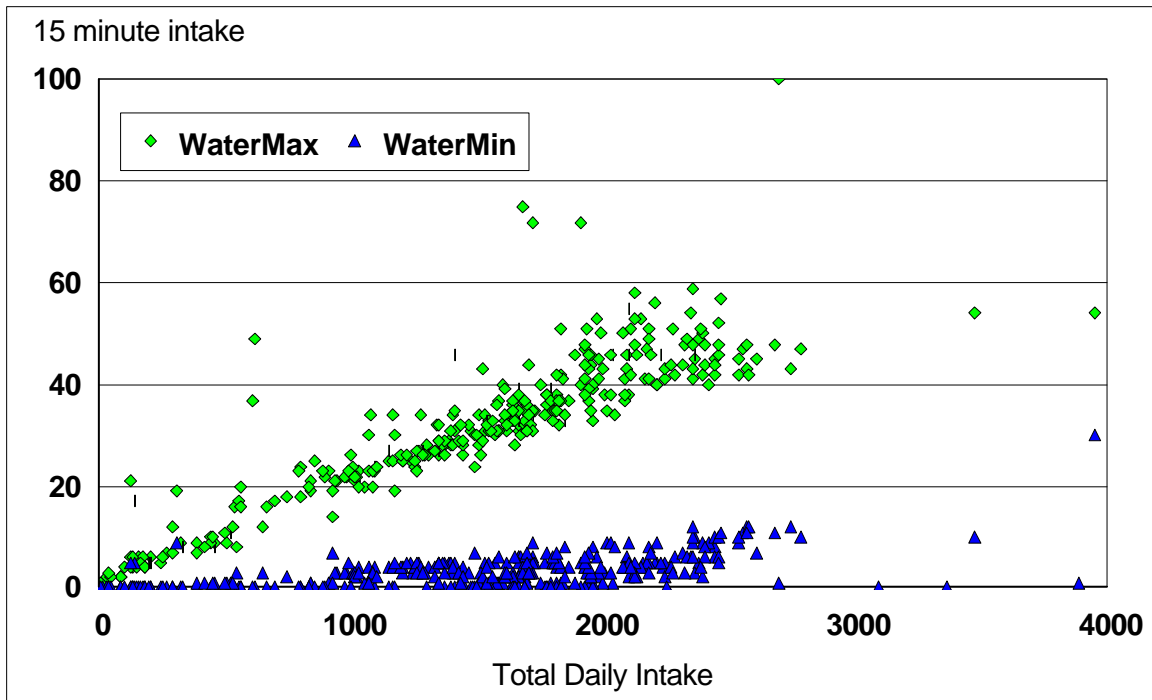


Water Max Min Regression



I've extracted these by adding new report columns in Barn Report - WaterMax (the highest reading measured in any 15 minute period during each day) and WaterMin (lowest reading in each day).

I've then extracted the data to a spreadsheet and carried out regressions of these values against total volume (on the respective days).

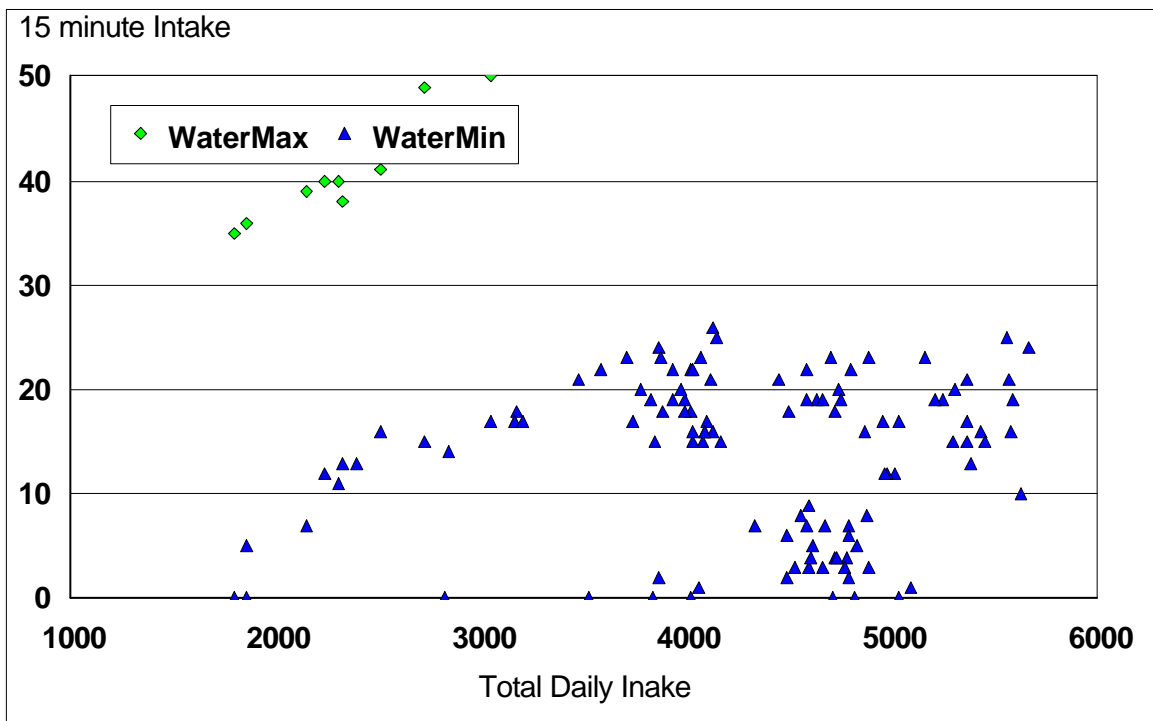
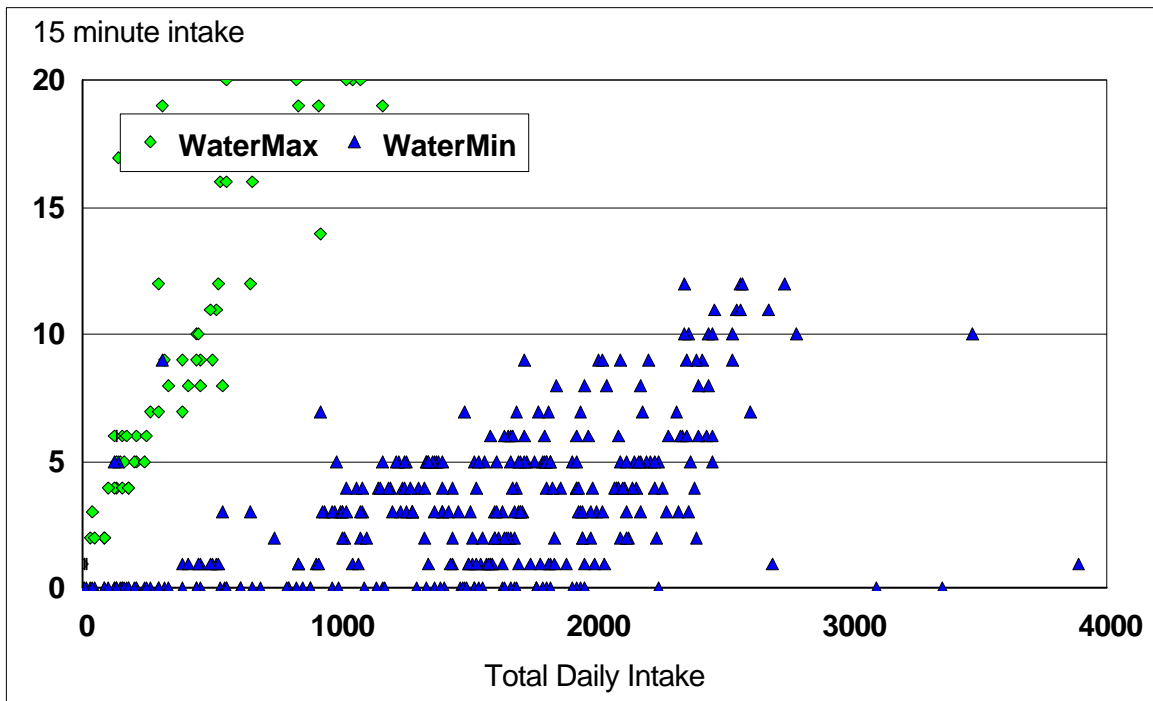
These are regressions from two sites - the second with a known problem with tail biting etc.

The regression is between the total daily volume measured (bottom axis) and the lowest and highest 15 minute readings.

Ok, so they're on marginally difference scales.

The first one shows the maximum readings for each day close around a line - i.e. it's very directly related to the total volume for the day. The second shows a much looser relationship.

Expanding the scales to show minima more clearly :



The first shows a relatively loose relationship between daily minimum and total volume, whilst the second shows a clearer relationship - more clear for lower values, strangely enough.

The kind of faults one might expect to be revealed by this kind of analysis might be :

If the Water Max value tops out, it would suggest water supply is a limiting value.

IF WaterMin seems to relate to total volume, it suggests a significant number of pigs are (and/or have to) drink out of hours to get enough.

Obviously, it would be preferable to be able to relate these values more specifically to age of pig.