



Food Animal Initiative

ENVIRONMENTS FIT FOR ANIMALS FIT FOR THEIR ENVIRONMENT

FAI Technical Datasheet Po6 - Mechanised cleaning and ark movement in free range systems - Update August 2005

At FAI we are interested in developing systems where people and animals can have good welfare. One of the major issues in free range poultry systems is the problems associated with wet muddy conditions in the winter. These conditions make the work harder for the stockman and also increase the risk of range destruction which destroys habitat for the birds both wild and domestic. Two methods of decreasing range damage are described.

'the facts.....'

Free range systems demand that birds spend at least half of their lives with access to range and that birds are reared for a minimum of 56 days. In practice this means that free range poultry houses have a 'turn round time' of between 5 and 10 weeks depending upon whether birds are brooded in the house or whether they are brooded elsewhere and then moved. There is usually a period of about a week within this time where houses are cleaned down and possibly moved to a fresh site.

Thus even in truly mobile systems there is little time for recovery of the range between flocks and in order for the birds to have good range conditions the quality of the range must be maintained at all times. Small birds will not cope with ruts in range and could be liable to getting stranded making them susceptible to predators and hypothermia.

Cleaning out and moving houses is done with machinery on most sites and litter in free range systems is often considerably wetter than indoor systems and has to be regularly topped up at certain times of the year in order to maintain conditions for the birds (see TDS Po4 Managing litter for free range poultry).



'..... the FAI response!'

At FAI we have chosen to have relatively small colonies of 660 birds. Some advantages are that;

- Arks are truly mobile and fresh ground can be readily accessed
- Birds can be treated as individuals as every bird can reliably be inspected on a daily basis.

One disadvantage is that more passages over the ground are required by machinery in order to service the houses.

This has been addressed in part by the use of a 10 tonne wood winch to move the houses. The maximum pulling power required is two houses each weighing 1.5 tonnes. This causes negligible damage to the ground compared to pulling with a tractor.

In addition sheets have been made which are placed in the house after washing down. These are removed from the front of the house by tractor when it is empty and the muck is placed directly in a trailer (see pictures). This is carried out before the house is moved with the winch. This process reduces contamination of the ground with litter and takes the grind out of the cleaning out process. It has been found necessary to make sheets in two halves in order to allow the litter to be removed without damaging the sheets. Litter weights are variable but maximum weights can be as much as 700kg per ark depending upon the wetness of the litter. The sheets are then taken to a wash area to be cleaned and dried.



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