



# Food Animal Initiative

ENVIRONMENTS FIT FOR ANIMALS FIT FOR THEIR ENVIRONMENT

## FAI Technical Datasheet Po2 - Increased income from improved range provision for poultry Update August 2005

The free range sector of the chicken and laying hen market is rapidly increasing. In the order of 30% of shell eggs in the UK are now sold as free range. Much of the range provided for birds is poor and there is potential to grow crops such as trees and willow which provide better range for the birds, act as a dual income stream for farmers and increase the number of trees in the country in line with national targets.

### 'the facts.....'

The law which allows chicken or eggs to be described as free range states that birds must have '.....continuous daytime access to open-air runs comprising an area mainly covered by vegetation ...'<sup>1</sup> (our underlining). Range provisions are 1sqm for broilers and 10sqm for laying hens.

Most free range birds currently range poorly i.e. not far from the house and in low numbers<sup>2</sup> and the areas used as range rapidly become depleted of vegetation.

The ancestor of all commercial chickens both laying hens and broilers is *Gallus Gallus* or the red jungle fowl which originates from the dry jungles of Indo-China where there is a mixture of trees and more open areas. Thus not surprisingly birds range better when provided with overhead protection in the form of artificial shelters, trees, hedges etc.<sup>2</sup>

When 'predators' are present free range birds will run to the nearest protection point. Predators may be real (crows, foxes) or perceived (aeroplanes). The birds are then observed to gradually return to their normal behaviours of food searching, dust bathing etc.

The England Rural Development Plan (ERDP)<sup>3</sup> run by DAFRA has two schemes which allow crops to be planted which can provide shelter and shade for birds and additional income. These are the Energy Crops and the Farm Woodland Grants Schemes.



Planting trees for free range chicken

### '.....and FAI solutions!'

Two types of range which have potential for increasing income in combination with poultry production are being trialled:

#### The planting of new trees

This project carried out by Oxford University with DEFRA funds is complete (data collection continues). The study showed the potential to integrate quality food production with agro forestry benefiting environment, birds, farmers, and the national purse. Birds do not regard trees as beneficial until canopy closure at year 3-4.

#### Biomass willow

Supply of energy from renewable sources is targeted by government at 10% for 2010 as part of the plan for reducing the emission of greenhouse gases by 12.5% by 2010 by reduction in use of fossil fuels. Modern types of willow can grow 3 meters per year and gross a tonne of dry matter per day from 3 hectares. This could make a significant contribution to the national grid and provide range for poultry. Grants are available.<sup>3</sup> Willow will provide shelter and shade for birds very quickly but must not be used until well above bird height as the plants will be damaged.



Planting willow for free range layers

1 Council Regulations 2295/2003 Annex III (eggs) & 2891/93 Annex IV (poultrymeat)

2 Dawkins MS et al 2003 Animal Behaviour 66, 151-160

3 <http://www.defra.gov.uk/erdp>



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