

# Woodlands for Poultry



There is a positive correlation between the availability of woodland or tree cover to free range hens, and their welfare. The most significant is reduced feather pecking in commercial flocks as seen with woodland cover of just 5%, and the positive correlation this has with reduced mortality rates. (Bright et al., 2011). This appears to result from increased ranging behaviour, foraging and dust bathing. (European Farmers Network, 2011) Further work undertaken by the Food Animal Initiative (FAI) has shown that woodland reared poultry in an agroforestry system offered a predicted Internal Rate of Return (IRR) of 15.5%. (Yates et al., 2007)

In planning woodland for free ranging hens, the key principle is seeking to increase ranging behaviour by the provision of 5-10% tree cover. This cover should ideally be provided close to the barn or shed to offer initial security as the birds come outside, with further woodland cover planted across the range to encourage free and more extensive movement of the birds. (Bright et al., 2011).

Trees need to develop a semblance of canopy before planted areas will be used by the birds, and three to four years is a typical timescale to achieve this post planting for bare-rooted tree stock. (FAI, 2003). Planting at a higher density will also help achieve this. Alternatively, mid-sized container grown trees could be used to reduce this timescale. Several practical options for designs are proposed by the Woodland Trust in their publication *Tree Planting for Free Range Poultry*. (Woodland Trust, 2014)

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## Cost of Establishment

Provided there is deer proof fencing around the proposed planting area, costs can be limited to plants and 60cm tree/shrub guards and maintenance works.

Light High Tensile Deer fencing (1.8 metres in height) would cost on average £8+VAT per linear metre, dependant on requirements for gates, corner posts and ground conditions. For quicker establishment, planting at 2 metre centres (2500 plants per hectare) or 2.4m centres (1600 plants per hectare) should be considered. Varied spacing can be incorporated easily to allow for the different requirement of the plants and the sites.

**Example of a 0.5 hectare planting scheme at 2m x 2m centres (2500 plants per hectare), using 60cm tree guards**

Design and set out with GPS and tractor unit to mark planting rows if required	£450+VAT
Tree planting – 40-60cm bare root plant with 60cm solid plastic guards & supporting soft-wood stakes at 2 metre centres(£2.96+VAT per plant.).....	£3700+VAT
Bi annual herbicide application (£250+VATper annum).....	£1000+VAT
<i>Annual maintenance should be budgeted for years 1-4 to secure establishment.</i>	
Beat up allowance for failed plants with allowances for higher losses in areas of greater poultry activity.....	£600+VAT
<b>Total.....</b>	<b>£5750 + VAT</b>

**Grant Support** – Possibly eligible for Countryside Stewardship Woodland Creation Grant (England) but likely restricted due the required scale of planting and competitive nature of the grant. There are no stated reasons within the scheme however why combined use could not be supported provided the woodlands are set within a target area and meet the minimum scale and planting density requirements.

### References:

Bright, A., Clachan, D., Drake, A. K. and Joret, A. D. (2011) *Canopy cover is correlated with reduced injurious feather pecking in commercial flocks of free-range laying hens.* Available at: <http://www.fairfarms.com/3es-publications/scientific-papers> (Accessed: 2 November 2015).

European Farmers Network (2011) *Laying Hens: The Outcome Approach.* Available at: [http://www.europeanfarmersnetwork.org/files/efn/documents/case\\_studies\\_7\\_0.pdf](http://www.europeanfarmersnetwork.org/files/efn/documents/case_studies_7_0.pdf) (Accessed: 3 November 2015).

FAI (2003) *FAI Factsheet Po2 - Increased income from improved range provision for poultry.* Available at: [http://www.fairfarms.com/resources/assets/fai/publication/poultry/fact\\_sheets\\_po2.pdf](http://www.fairfarms.com/resources/assets/fai/publication/poultry/fact_sheets_po2.pdf) (Accessed: 3 November 2015).

Yates, C., Dorward, P., Hemery, G. and Cook, P. (2007) *The economic viability and potential of a novel poultry agroforestry system.* Available at: <http://www.fairfarms.com/3es-publications/scientific-papers> (Accessed: 2 November 2015).

Woodland Trust (2014) *A Woodland Trust guide to tree planting for free range poultry - practical help on how to incorporate trees.* Available at: <http://www.woodlandtrust.org.uk/publications/2014/04/tree-planting-for-free-range-poultry/> (Accessed: 3 November 2015).