

INTRODUCTION

There is a growing demand for meat and eggs that have been produced in systems that allow animals to express their natural behaviour. Poultry evolved within a woodland ecosystem and have a role to play in managing small woodlands. Animals that are able to express their natural behaviour, by foraging in the case of poultry, tend to be healthier animals and this can have a beneficial effect on the quality of the final product such as meat and eggs. Products of a high quality can command a market premium, as can products from high welfare and environmentally friendly systems. Chickens reared under the French Label Rouge System fetch a premium of up to 100% compared to standard or free range chickens both in France and abroad.



Fig 1: Poultry in Agro-Forestry system

The reintegration of poultry into woodland systems will also help to conserve some of the more traditional breeds within the UK. Poultry breeds are disappearing on a world wide basis. Traditional breeds tend to be hardier than modern breeds developed for indoor systems. Traditional breeds tend to have better foraging abilities allowing them to feed efficiently outdoors.



Fig 2: Plymouth Barred Rock

POULTRY BREEDS

There are over 100 breeds and varieties of poultry within the UK. The Poultry Club of Great Britain classifies breeds into five categories: Hard Feather; Soft Feather Heavy; Soft Feather Light; True Bantams and Rare breeds. The Soft Feather Heavy breeds were developed as table birds whereas the Soft Feather Light breeds were developed for their egg laying abilities. True Bantams are naturally small and have no large counterpart. Some Bantams have been developed into utility breeds. Suitable Soft Feather Heavy breeds for table bird production include Orpington, Sussex, Plymouth Rock and Wyandotte. Crosses between Hard Feather and Soft Feather Heavy breeds also make good table birds. Commercial hybrids are also available. These are generally only available in large numbers, however some breeders are able to supply small numbers of day old chicks to the smaller scale producer.

TABLE BIRD PRODUCTION

There are no established standards for producing table birds within a woodland or silvopasture production system. However, the Code of Recommendations for the Welfare of Meat Chickens and Breeding Chickens (Defra) are a useful reference. If applying for organic status the relevant standards of the certifying body will also apply.

Essential to a successful table bird operation is a high level of stockmanship and the suitability of the bird to the system. Research at Oxford University suggests that slower growing birds that are finished at 81 days are more suited to silvopasture systems than birds that are finished by 56 days of age.



Fig 3: Broiler chicks in brooder shed

Birds are normally bought in as day old chicks and reared within a brooder shed for 3 weeks or so. Birds are then transferred to the main rearing house. Birds are normally confined to the house for a few days in order to adapt to the new housing. Pop holes and doors in the house can be opened to allow the birds access to the range. Birds are encouraged back into the houses at dusk to reduce predator attack. The time to finishing will be highly dependent on the breed of bird used.

When the birds are ready, they should be gathered into transporter boxes and taken as quickly as possible to the abattoir. Confinement and transport can cause considerable stress and this should be minimised where possible.



Fig 4: Chickens in Agro-Forestry system

Before the next intake of birds, the hen houses must be thoroughly cleaned and disinfected before moving to clean pasture and range area.

SILVOPASTURE SYSTEMS

Few free range systems incorporate woodland habitats although many do provide shelter, dust baths and other behaviour enriching environments. Where woodland habitats have been included, this has tended to be done by including avenues of trees and herb rich strips of pastures. The creation of avenues of trees allows the hen houses to be moved down the pasture between them with each new intake of birds.

Planting herb rich strips has also been found to be beneficial for the birds. At Sheepdrove Organic Farm a mixture of herbs have been planted which provide both nutritional and medicinal elements. The tree planting at Sheepdrove has also been mixed to provide timber, shelter and food. In a Defra funded Poultry in Natural Environment (PINE) Project, the impact of the chickens was shown to be beneficial to the trees. At both PINE and Sheepdrove a combination of broadleaved and coniferous trees have been planted. The PINE project results also suggest that by incorporating chickens into new woodland plantations an economic return is achieved much sooner.

REFERENCES and FURTHER INFORMATION

For information on the Defra funded PINE project: <http://users.ox.ac.uk/~snikwad/PINE.html>

For general information on poultry: www.poultryclub.org

For animal health and welfare guidelines: <http://www.defra.gov.uk/animalh/animindx.htm>