

Feature

Perches and mealworms give poults the edge

Research by Mark Whiteside of Exeter University, in association with the Game & Wildlife Conservation Trust, show the importance of providing perches and mealworms to pre-release pheasant chicks.

WE ALL KNOW THAT PHEASANTS ROOST UP IN trees at night to avoid ground predators, but how and when do they learn this behaviour? How important is it that hand-reared pheasants get the chance to roost on perches before release?

This latest research suggests that this behaviour is learnt early on as chicks; and those chicks that have perches provided at the start quickly get the hang of using them. Indeed, the research suggests that poor roosting behaviour is one of the main reasons why hand-reared pheasants suffer from high predation immediately after release.

In the wild, at around three weeks old, chicks are encouraged by their mother to follow her to roost off the ground, initially using small, low perches. They gain strength and are soon able to roost higher in the trees out of reach of ground predators.

Conversely, hand-rearing normally involves an unstimulated system of heated huts and outdoor pens, with no perches to roost on. The first two months following release is crucial for these poults with many (sometimes up to 25%) being lost to predators. Mark's research investigated whether chicks in the rearing shed that



were provided with perches were able to avoid predators after release better.

He studied 900 chicks from one day old, which were housed in groups of 30 in a heated house for the first two weeks, and for the next five weeks had access to a grass run, half with perches and half without. Following this, they were mixed up and placed in one of two release pens at an estate in Hampshire.

Mark monitored the birds for the six weeks after release by sitting in the release pen at night using night vision equipment to record the number of birds roosting, identifying them and the

Learned behaviours help chicks after release.

perching treatment they came from by wing tags. In the first two weeks after release he noted that about 70% of the roosting birds had been reared with access to perches.

Using perches is not just a matter of experience; the birds also need the physiological mechanisms to fly to a higher, safer perch, and have the balance skills to roost overnight on small branches possibly in windy conditions. Mark found that the birds that had early access to perches were stronger, and were better suited to roosting overnight on high branches. This had survival implications for the birds after release with more dying of natural causes post-release from the groups that had no early access to perches.

In a separate but related study, Mark also investigated whether providing a more natural diet of mixed seeds, fruits and mealworms pre-release helped pheasants adapt more quickly to life in the wild. Mark found that birds fed with the natural diet were twice as quick at



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catching and eating tethered crickets, when reaching four weeks old, than those that had previously only eaten chick crumbs. Once released, these natural-fed birds showed more efficient foraging behaviour, spending less time searching for food.

Mark explained: "Released pheasants face three distinct threats post-release. They are more vulnerable to predation than wild birds; they are unable to maintain body condition because of poor foraging efficiency; and finally, the birds could become dependent on supplementary feeding, which is often withdrawn in the spring and the birds are often unable to make the transition to a more natural diet. Pheasants typically forage in the open and are therefore at risk to aerial predators. Adopting a more efficient foraging strategy means that a bird will obtain enough food for survival and spend less time exposed to predation." Another interesting discovery from the study is that the natural-fed birds had a 5% smaller gut. A smaller gut suggests that they are more able to cope with a high energy diet. Also, a lighter bird may have increased flight efficiency and therefore a better ability to avoid predators.