

Appendix F



AUDIT QUESTIONS AND IMPLICATIONS HATCHERY AND FARM MANAGERS NEED TO CONSIDER

Critical questions are shaded (NA = not applicable). Place a tick as applicable.

Breeder farm questions	Yes	No	NA	Implications
Does the genetic strain have a high propensity for feather pecking and cannibalism?				Pecking characteristics of flocks are heritable. Progeny may inherit pecking tendencies from the breeder flock.
Are staff looking after breeder flocks trained in bird husbandry and do they have a good attitude toward birds?				Untrained staff can cause stress to breeder flocks which is transferred to progeny via epigenetics.
Have breeder flocks been stressed during the period when fertile eggs were collected?				Stressed breeder flock may result in stressed progeny via epigenetics.
Do breeder flocks have sharp claws?				Sharp claws can be inherited by progeny and can result in injuries to other birds and cannibalism. Breeders are selecting for birds without sharp claws.
Is the diet optimised for breeder hens?				A poor diet for breeder hens may lead to a poor hatch and batches of chickens more prone to being pecked or cannibalised.

Hatchery questions	Yes	No	NA	Implications
Are fertile eggs set within the optimum weight range?				Hatching small fertile eggs may lead to smaller chicks being placed with larger chicks and the smaller chicks are more prone to being pecked or cannibalised.
Do you avoid hatching chicks from old breeder flocks with poor egg quality?				Eggs hatched from older breeder flocks and poor quality eggs may result in variable chick quality, with increased risk of pecking occurring.

Place a tick as applicable.

On-farm questions (rearing and laying)	Yes	No	NA	Implications
Have staff been trained in husbandry skills?				Untrained staff with poor attitude can stress birds and cause feather pecking.
Do staff walk through the flock calmly, quietly and consistently when checking birds?				Ensuring staff walk through the flock calmly, quietly and consistently helps to reduce fear and stress of the flock when interacting with people.
Are floor eggs picked up regularly and consistently throughout the day during the first weeks of lay?				Floor eggs can encourage birds to group together leading to smothering, injuries and feather pecking and stress in the flock.
Are injured birds and pariah birds removed from the flock as soon as possible?				Injured birds and pariah birds can attract other birds to peck at them, encouraging social transmission of feather pecking within the flock.
Do you remove dead birds from the shed as soon as possible?				Birds will peck at the carcass which can encourage feather pecking at other birds.
Are there any birds which are underweight and in poor health?				Birds which are in poor health and/or underweight should be culled as they can attract other birds to peck at them.
Is the flock's body weight uniform?				Large variations in body weight can result in feather pecking and cannibalism.
Is light intensity kept low (3–5 lux) in controlled environment housing during rearing and laying?				Keeping light intensity as low as 3 lux during rearing and less than 5 lux during lay reduces the risk of pecking.
Is light intensity managed in open-sided sheds where birds are exposed to natural light during rearing and lay?				Maintaining a light intensity of 10–15 lux from four to six weeks through to 14 weeks and then increasing to the daylight levels that the birds will experience in the shed during lay reduces the risk of pecking.
Is the ingress of direct sunlight or bright light managed in naturally ventilated/open-sided sheds?				Areas of bright light in the shed can induce feather pecking.
Is there uneven light intensity around nest boxes in open-sided sheds?				Variations in light intensity around nest boxes can cause competition for boxes in darker areas and result in pecking.
Are abrupt shifts in light intensity between shed/verandah and range areas managed?				Abrupt shifts in light intensity can trigger feather pecking and cannibalism.
Is light speckling minimised in the shed?				Variation in light speckling in the shed can stress birds and cause smothering, mortality and feather pecking.
Is the diet formulated correctly for the age of birds?				Deficiencies in protein and sulphur amino acids can result in feather pecking.
Are ration changes introduced to the flock gradually?				Changing from one diet to another quickly can stress the birds and induce feather pecking.
Is a mash diet fed to the birds?				Mash diets keep birds occupied by increasing feeding time and reducing feather pecking activity.

Place a tick as applicable.

On-farm questions (rearing and laying)	Yes	No	NA	Implications
Is adequate insoluble fibre included in the diet?				Additional fibre gives the birds a calm feeling and reduces the desire to peck at feathers.
Is indoor stocking density correct according to the current welfare code, standard or guidelines?				High stocking density may result in increased pecking and cannibalism.
Is good quality litter provided in non-slatted floor sheds or sections of sheds?				Good quality litter keeps birds occupied. Dust bathing and litter scratching reduces feather pecking activity.
Is the litter maintained in a dry friable state?				Damp litter reduces bird comfort and may lead to severe and aggressive pecking.
Is the minimum amount of paper used under brooders for chicks at placement?				Excess paper causes a mat of manure, restricts dust bathing and foraging behaviour. Chicks may engage in feather/toe pecking instead.
Is there a smell of ammonia or high dust levels in the shed?				Poor air quality can result in an increase in pecking activities.
Are noise levels kept to a minimum inside and outside the shed?				High noise levels can stress birds and encourage bouts of pecking.
Are birds exposed to extreme weather events?				Extreme weather events such as lightning can stress birds and encourage bouts of pecking.
Is environmental enrichment provided to birds to help keep them occupied during rearing and lay?				Good enrichment in sheds and on the range during rearing and lay keeps birds occupied and reduces feather pecking activity. If enrichment is used during rearing, birds are more likely to use enrichment during lay.
Are birds causing the pecking removed as soon as they are observed?				The presence of aggressive birds can result in bouts of pecking and cannibalism. If they are not removed quickly social transmission of pecking may occur.
Are the birds being pecked at removed as soon as they are observed?				If left in the flock these birds will vocalise, squawk, cower or jump which encourages the offenders to continue pecking and attracts more birds to join in.
Is all equipment including nest boxes, feeders and drinkers operating and set up correctly in the shed?				Breakdown or poor layout of equipment can stress birds and cause bouts of pecking.
Are nest boxes readily accessed by birds via steps and landing board?				Birds having difficulty reaching nest boxes may be pecked at by other birds.
Are nest boxes regularly checked for dead and broody birds and are they removed?				Carcasses and broody birds are pecked at by other birds in the nest, which stimulates further pecking at other birds.
Is the quality of infrared beak treatment checked after chicks are placed in brooder on delivery and then again at four weeks of age?				Birds that are not adequately beak treated will engage in feather pecking and cannibalism.
Is feather cover of pullets checked when birds are placed in the layer shed?				Poor feather cover at transfer to laying shed indicates pecking problems during rearing which could continue during the laying period.