

FEATHER CONDITION AND BEHAVIOUR SCORING SHEETS



How to rate score feather condition

1. Select 50 birds randomly from the flock.
2. Score the feather condition and include the likely cause of feather damage for each location on the bird: head and neck, back and vent, flight feathers.
3. Total the score for each location on the bird.
4. Record pecking behaviour incidents by standing still, letting the birds settle and quietly observing the flock for several minutes.
5. Score the flock flightiness.

Feather scoring

Feathering or plumage damage of individual birds can be assessed visually using a suitable scoring system. Several systems have been developed mainly for scoring in research situations. On-farm scoring needs to be simple and easy to apply. Scoring of the flock gives an indication of the plumage condition, feather pecking status, long-term effectiveness of beak tipping as well as feather damage due to equipment such as cages, feeders and drinkers or loss of feather cover due to a partial moult.

Regular monitoring of each flock throughout the rearing and laying periods will identify severe feather pecking and feather loss and enable early instigation of corrective action to reduce the risk of injuries and cannibalism. It will also indicate the effectiveness of the enterprise strategy to manage pecking and cannibalism.

It is best to score feather condition of pullets (particularly if purchased as started pullets) immediately before and after moving birds to the laying facilities. This will identify if the scoring in both facilities is at the same standard. If the scores are significantly different an investigation should be made into the scoring methods. Scoring at these times also gives a base line with which to compare the feather score if there is a significant pecking incident during lay.

An 'at risk' flock can exhibit feather damage as early as 17 weeks. On arrival from the rearing farm the feather score should be rated as good with no plumage damage.

If a flock reaches 40 weeks of age with good feathering, hens generally maintain relatively good plumage until depopulation unless there is an abnormal stressor such as hot weather or disease.

A simple on-farm three-point scale scoring system can be used to assess feather damage without handling birds housed on floor systems and can be done visually at a distance of approximately 2 metres from the bird. Caged birds may need to be removed from the cage and held for assessment. The head and neck area, the back and vent area and the flight feathers are each scored separately. A sample size of 50 birds will give an indication of the feather condition in the flock. Scoring more birds (100–200) will give a more accurate assessment if there is large variation in the flock's feather condition.

Feather scoring can be used as a tool to develop a stock attendant's skill in observing the feather condition of the flock during daily checks and result in earlier detection of feather pecking.

The three-point feather scoring system

Score	Condition	Plumage description	Flight feather condition
1	GOOD	Minor deterioration of feathers, otherwise good feathering with skin completely covered by feathers.	Intact flight feathers
2	AVERAGE	Clear deterioration of feathers with some feather loss, there may be small areas of bare skin visible.	Broken or separated flight feathers
3	POOR	Heavily damaged feathers with small to large areas of feather loss. Small to large areas of bare skin often visible.	Many flight feathers missing or broken

Adapted from AssureWel.

Score 1: GOOD. Typical of hens 16–40 weeks of age.

Score 2: AVERAGE. Typical of hens 30–80 weeks of age.

Score 3: POOR. Seen in hens of any age. Poor feathering is an indicator of feather pecking or abnormal deterioration in feather condition caused by management practices, environment, equipment and nutrition.



GOOD: Well feathered hen. Typical for pullets from transfer to laying facilities and up to 30 weeks of age.



GOOD: Minor feather wear. Typical of hens to 40 weeks of age.



GOOD: Well feathered. Some contour feathers at base of tail removed by pecking. (Indicator that feather pecking is starting. Be vigilant — manage stressors and observe the flock.)



AVERAGE: Deterioration of feathers especially tail feathers (typical of hen at 45–80 weeks of age).



AVERAGE: Contour feathers at base of tail and below wing removed by pecking. (Be vigilant — manage stressors and observe the flock.)



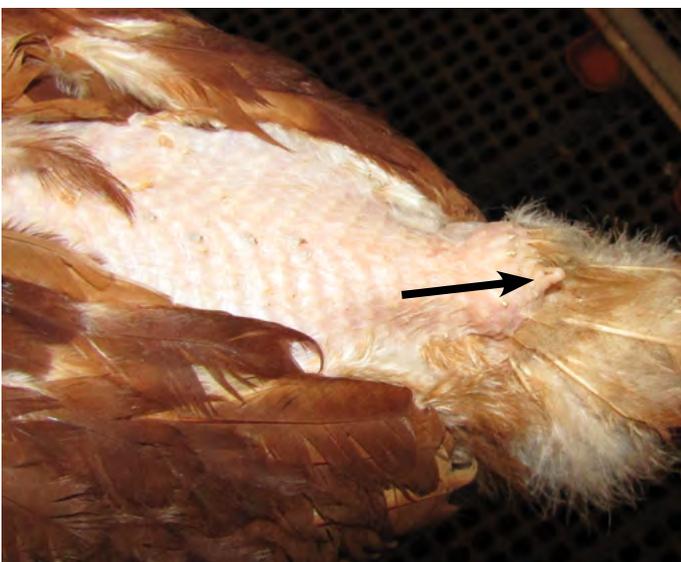
POOR: Deterioration of flight feathers, loss of contour feathers on legs and breast and around base of tail.



POOR: Loss of contour feathers on wing and some thigh wear. Feather loss on neck from abrasion on feed trough. Note: Wear can also occur on the chest from feed trough. Feather wear on front, side or back of neck may occur from feathers rubbing on wires on the cage front.



POOR: Wear and breakage of flight feathers and wing contour feathers from rubbing against to cage sides. Back feather wear from trampling at feed trough or in cage.



LEFT POOR: Feathers removed from back by pecking leaving bare skin and uropygial (oil) gland exposed to injurious pecking. (Be vigilant — manage stressors and observe the flock.)

RIGHT POOR: Feathers around vent and abdomen area removed by pecking leaving bare skin exposed to injurious pecking. (Be vigilant — manage stressors and observe the flock.)



How to randomly select birds for feather and pecking behaviour scoring

The birds scored must be representative of the flock. The process for selecting a random representative sample of birds for feather scoring is as follows.

From cages

1. Select cages throughout the house (i.e. both ends of the house as well as the middle).
2. Select cages from top, middle, and lower tiers particularly if there is large variation in feather condition. The poorest feather condition is likely to occur in the upper two cage tiers due to higher light intensity.
3. Score one bird from each selected cage (if pecking is occurring in a cage most birds in the cage will exhibit signs of being feather pecked).
4. Assess each bird standing in a natural or normal position either in the cage, ensuring birds move within the cage or by removing the selected bird carefully from the cage.

From a litter and/or slatted floor shed

1. If there are several sheds with birds of the same age, randomly select one shed for sampling.
2. Select 10 different locations in the house and score five birds in each location.
3. Ensure that birds are scored from different locations such as litter area, slatted area, perches and various levels or tiers.
4. Stand 2 metres from the birds and visually assess the plumage cover of the head/neck and back/vent area and wings without handling the birds.
5. It is easier and preferable to score free range birds before they are let out on the range.
6. If birds are already ranging, scoring half the birds in the shed and the other half randomly on the range will give an indication of feather damage/condition.
7. Sample birds on the range from various locations (i.e. 5, 10, 20 and 30 metres from shed). This depends on the shed and range layout.
8. Be aware that hens may be seeking refuge in the nesting system or under perches or on the top perch depending on the type of perch used.

It is preferable to do the scoring after the hens have completed lay for the day.

Scoring pecking behaviour, flock vocalisation and flightiness

High levels of feather pecking behaviour in a flock can result in feather loss or painful injury with the added risk of cannibalism. These disruptive behaviours can increase the general level of stress and fear among the birds and some may be prevented from accessing all the facilities such as nest boxes and pop-holes. Flock vocalisation such as squawking and flightiness are indicators of behaviours associated with pecking problems.

Assess pecking behaviour at each location where feather condition is scored. To score pecking behaviour listen to and observe the birds for one minute after they have settled down. Record the number of incidents of pecking observed in a minute as:

- social behaviour to establish 'peck order', (sometimes referred to as aggressive behaviour) e.g. pecking at other birds or feathers, chasing other birds or fighting, or
- severe pecking which includes pulling out feathers, pecking at combs, wounds or the vent area.

Both behaviours are often signalled by a loud vocalisation or squawk and cowering behaviour. Score the flock vocalisation and flightiness at the same locations.

Observing flightiness, pecking behaviour and feather condition should be part of your daily checks on flocks.

If birds are found with severe pecking wounds, they should be removed and killed humanely. Minor wounds should be treated with Stockholm tar to prevent further damage to the injured bird. The pecking bird should be identified and destroyed in a humane manner.

FEATHER CONDITION AND BEHAVIOUR SCORING SHEET

Date	Shed/flock ID	Age of flock
Farm	Hatch date	Mortality to date %
Production system*	Flock number at placement:	Body weight
Breed	a. Brooding b. Laying	Uniformity %

* cage, aviary, barn, free range

Score	Condition	Plumage description	Flight feather condition
1	Good	Minor deterioration of feathers, otherwise good feathering with skin completely covered by feathers.	Intact flight feathers
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Bird	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Head/neck																									
Back/vent																									
Flight feathers																									

Bird	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Head/neck																									
Back/vent																									
Flight feathers																									

Feather condition score and likely cause of feather wear summary

Totals	Head/neck	Back/vent	Flight feathers	Normal	Equipment	Pecking
Score 1						
Score 2						
Score 3						

Pecking behaviour

	Number of incidents
Social pecking	
Peck order pecking	
Feather sucking	
Feather pulling	
Serious feather pecking	

Flock vocalisation

Sound	Number of occurrences
Normal	
Squawking	
Warning or alert calls for danger or predators	

Flock flightiness

Calm	
Cautious	
Flighty	