

## Laying Hen Welfare Outcome Assessment

### Explanation of measures

#### Feather Loss

##### Why is feather loss important?

Feather loss can be a result of various issues, however the location of the feather loss on the bird can help to provide an indication of potential cause. Loss of feathers to the **back and vent** areas usually indicate feather pecking. The causes of feather pecking are multifactorial but can include breed, nutritional imbalance, housing issues, poor range use and rearing conditions. Feather pecking can be very painful and can result in severe injury, sometimes even cannibalism and death. The resulting poor feather cover can lead to thermal discomfort (cold/sunburn) and reduced productivity. It is understood that the birds carrying out feather pecking are in a stressed state leading them to start this behaviour.

Damage to feathers on the **head and neck** can indicate the occurrence of aggressive pecking, often aimed at the head and with the potential to lead to further injury.

Other causes of feather loss are **mechanical damage** (equipment wear, usually head/neck areas affected), high levels of egg **production** and **disease**.

#### Measuring feather loss using the AssureWel protocol

<b>Sample size:</b>	50 birds
<b>Method of assessment:</b>	Assess and score 5 birds in each of 10 different areas of the house and/or range. Visually assess the head/neck area and back/vent area of the bird (without handling birds).
	Score separately for <b>head/neck</b> area and <b>back/vent</b> area.
<b>Scoring:</b>	<p><b>0 = No/Minimal feather loss</b> No bare skin visible, no or slight wear, only single feathers missing</p> <p><b>1 = Slight feather loss</b> Moderate wear, damaged feathers or 2 or more adjacent feathers missing up to bare skin visible &lt; 5cm maximum dimension</p> <p><b>2 = Moderate/Severe feather loss</b> Bare skin visible ≥ 5cm maximum dimension</p>

#### Bird Dirtiness

##### Why is bird dirtiness important?

Under normal circumstances healthy birds keep themselves clean, they will avoid dirty areas and carry out regular preening. Dirt around the vent can indicate diarrhoea. Dirt on feathers might indicate inadequate litter quality, a wet and muddy outside run and/or poor design of the perching/nesting area. It is a potential source for spreading disease and of relevance for general hygiene and bird wellbeing.

## Measuring bird dirtiness using the AssureWel protocol

<b>Sample size:</b>	50 birds
<b>Method of assessment:</b>	Assess and score 5 birds in each of 10 different areas of the house and/or range. Visual assessment of one side of the bird, except the feet and legs.
<b>Scoring:</b>	<p><b>0 = Clean</b> The bird is clean</p> <p><b>1 = Moderate dirtiness</b> There is soiling on at least one part of the bird but no area <math>\geq</math> 5cm maximum dimension</p> <p><b>2 = Substantial dirtiness</b> There is soiling on one or more parts of the bird <math>\geq</math> 5cm maximum dimension</p>

## Beak Trimming

### Why is beak trimming important?

A hen's beak is well supplied with nerves and therefore poor or excessive beak trimming may cause pain. Abnormalities of the beak length or shape may interfere with a bird's behaviour when eating or drinking. Trimming over 1/3 beak is illegal.

All producers are urged to work towards keeping laying hens without beak trimming by 2016 (Defra proposed date for a legal ban) or sooner where possible. Assessing if birds have been beak trimmed or not allows for the collection and analysis of useful data as we work together with the industry towards being able to ban beak trimming without compromising overall hen welfare.

### Measuring beak trimming using the AssureWel protocol

<b>Sample size:</b>	Whole flock
<b>Method of assessment:</b>	<p>a) Refer to chick placement records and/or ask the unit manager to determine whether /when the birds were beak trimmed.</p> <p>b) Visually assess the birds' beaks during the assessment.</p>
<b>Record:</b>	<p>a) - <b>Flock not beak trimmed</b></p> <p>- <b>Flock beak trimmed before 10 days of age</b></p> <p>- <b>Flock beak trimmed as emergency procedure under veterinary advice</b></p> <p>b) <b>Number</b> of any birds seen which have more than 1/3 beak removed.</p>

## Antagonistic Behaviour

### Why is antagonistic behaviour important?

Antagonistic behaviour includes both aggressive behaviour and injurious feather pecking. High levels of these behaviours within the flock can result in extensive feather loss and painful injury, with the added risk of cannibalism. These behaviours can also increase the general level of stress and fear among the birds. Some birds may be prevented from accessing all facilities, e.g. nest boxes and pop holes.

### Measuring antagonistic behaviour using the AssureWel protocol

<b>Sample size:</b>	Whole flock
<b>Method of assessment:</b>	<p>Observe and listen to the behaviour of birds in the house for one minute (after allowing time for birds to return to undisturbed behaviour) and during the rest of the time spent in the house or on the range.</p> <p>Antagonistic behaviours include two distinct behaviours:</p> <p><b>Aggressive behaviour</b> - fighting, aggressive pecking at or chasing other birds. A social behaviour to establish pecking order.</p> <p><b>Injurious feather pecking</b> - includes pulling out feathers, pecking at wounds or vent. Believed to be redirected foraging behaviour.</p> <p>Both are often signalled by a loud squawk or vocalisation.</p>
<b>Record:</b>	<b>Number</b> of incidents of antagonistic behaviour observed or heard. Identify, if possible, whether either aggressive behaviour and/or injurious feather pecking are observed.

## Flightiness

### Why is flightiness important?

A simple observation to help indicate the general behaviour of the flock and how accustomed the birds are to humans (indicating how regularly and thoroughly the birds are walked). Flighty flocks may be stressed and more prone to smothering.

### Measuring flightiness using the AssureWel protocol

<b>Sample size:</b>	Whole flock
<b>Method of assessment:</b>	Observe the behaviour of birds during the assessment.
<b>Record:</b>	<p><b>Calm</b> - In general, the birds appear undisturbed by your presence or actively approach you</p> <p><b>Cautious</b> - In general, the birds' behaviour is disturbed by your presence but the birds do not appear actively alarmed</p> <p><b>Flighty</b> - The birds appear actively alarmed by your presence</p>

## Birds Needing Further Care

### Why is 'birds needing further care' important?

Sick birds require additional attention to ensure any suffering is alleviated as soon as possible. Early recognition, treatment or culling of sick birds is the key to reducing any potential welfare compromise. A high level of birds requiring further care may indicate that flocks are not being inspected regularly enough or have an underlying health issue.

### Measuring birds needing further care using the AssureWel protocol

<b>Sample size:</b>	Whole flock
<b>Method of assessment:</b>	Assess the whole flock for sick or injured birds that would benefit from hospitalisation (removal from the main flock) or should be culled.
	This would include obviously sick birds (with fluffed up feathers and an inactive, unresponsive appearance) and birds with body wounds that have fresh blood that might attract cannibalistic attention from other birds. Include birds in hospital pen that should be culled.
	Do not include sick or injured bird already receiving suitable care.
<b>Record:</b>	<b>Number</b> of any sick/injured birds found that would benefit from hospitalisation or culling. Record if possible the type of sickness/injury: sick, loose droppings, skin lesions, eye problem, lameness, other.

## Mortality

### Why is mortality an important measure?

A key welfare measure that can reflect incidence of disease, predation, high levels of injurious feather pecking, or other serious welfare issues. Recording levels of mortality can help establish relationships between potential welfare issues (e.g. injurious feather pecking) and resulting levels of mortality.

### Measuring mortality using the AssureWel protocol

<b>Sample size:</b>	Whole flock
<b>Method of assessment:</b>	Refer to records and/or ask the unit manager
<b>Record:</b>	<ul style="list-style-type: none"> <li>a) Mortality of previous flock</li> <li>b) Mortality to date</li> <li>c) Mortality to 40 weeks (where applicable)</li> </ul>
	Record if possible, the predominant cause of mortality for each of a, b and c.