Welfare Quality® - Animal based parameters in layers

K. Niebuhr

Institute of Animal Husbandry and Animal Welfare
University of Veterinary Medicine Vienna
Laying hens

K. Niebuhr
Laying hens

1) Good feeding

resource based parameter:
Feeding equipment (feed trough length/bird)

resource based parameter:
watering equipment (birds/number of drinkers)
Laying hens

2) Good housing

resource based parameter:

a) length of perches

resource/management based parameter:

b) presence of red mites

c) dust level in the air (dust sheet)
Laying hens

2) Good housing

*animal based parameter:*

d) percentage of birds panting or huddling

*resource based parameter:*
e) stocking density (cm²/animal)
f) percentage of perforated floors (%)

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3) Good health / absence of injuries

animal based parameter:

a) percentage of animals with keel bone deviations
b) percentage of animals with skin lesions
c) percentage of animals with foot pad dermatitis
d) percentage of animals with toe damage
Laying hens

3) Good health / absence of injuries

animal based parameter:

a) percentage of animals with keel bone deviations

 Strait keelbone  Keelbone with deviation  Keelbone with deformation
© Centre Staack, University of Kassel, © Left and right: Fils-enz Niekerk, WUR
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3) Good health / absence of injuries

animal based parameter:

b) percentage of animals with skin lesions

More than 3 small wounds, or wound > 1 cm < 2 cm

Wound > 2 cm

Photos: M. Staack

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3) Good health / absence of injuries

animal based parameter:

c) percentage of animals with foot pad dermatitis

1: proliferation of epithelium

2: bumble foot (dorsally visible)

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3) Good health

animal based parameter:

e) mortality

f) culled hens

g-k) presence of enlarged crops, eye pathologies, respiratory infections, enteritis, parasites, comb abnormalities
Laying hens

3) Good health

animal based parameter:

j) beak trimming
**Laying hens**

4) Appropriate Behaviour

*animal based parameter:*

a) aggressive interactions  
b) plumage damage  
c) comb pecking wounds  
d) nest use (distribution of eggs on egg belt)  
e) dust bathing/use of litter
Laying hens

4) Appropriate behaviour

animal based parameter:

b) percentage of animals with plumage damage

Photo: C. Keppler

Photo: C. Keppler

Photo: M. Staack

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Laying hens

4) Appropriate behaviour

animal based parameter:

c) percentage of animals with comb pecking wounds

Score = 1

Score = 2

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4) Appropriate behaviour

animal based parameter:

f) percentage of animals on range

g) percentage of animals in covered verandah

re ss ource based parameter:

h) occupational material

i) cover on range
Laying hens

4) Appropriate behaviour

animal based parameter:

j) human animal relationship: avoidance distance
k) novel object test
l) positive emotional state:

Qualitative behavioural assessment (QBA)
Thank you!