**Supplementary Table S1** *Ethogram of behaviours observed during direct focal sampling*

|  |  |  |
| --- | --- | --- |
| State | Locomotion | Activity |
| Lie | Immobile | Rest¹ |
| Stand | Walk | Preen |
|  | Run | Eat² |
|  |  | Drink² |
|  |  | Idle³ |
|  |  | Dustbathe |
|  |  | Ground peck² |
|  |  | Aggression4  Vigilance5  Disturbance6  Bale peck2 |
|  |  | Other7 |

(Adapted from Weeks *et al*. (2000) and Kells *et al*. (2001))

¹ Resting: bird is sitting or standing still with head rested on breast, chest or floor – eyes are open or closed.

² Eating, drinking, ground pecking and bale pecking are recorded as continuous (i.e. non-stop) bouts from the moment the birds lower their heads to the feeder or ground, or stretch up to the drinker, until they raise or lower their heads, respectively.

³ Idle: bird remains still in the standing or lying position with head in the upright position – eyes are open. Bird is not engaged in locomotion or any of the other activities within the ethogram.

4 Aggressive interaction including the occurrence of any of the following behaviours (modified after Estevez *et al*., 2002): standoff, threat, and peck. A standoff was defined as when two birds stood facing one another with their heads raised at the same level. A threat was defined as an encounter in which a bird stands with the neck erect and feathers raised in front of a second bird which had its head at a lower level. A peck was defined as when a bird raised its head towards, and vigorously pecked at, a second bird.

5 Vigilant: top of bird’s head is above the back and the beak is horizontal or angled upwards (not engaged in other active behaviours– bird appears tense) (Newberry and Shackleton, 1997).

6 Disturbance: bird stops lying and stands because other birds step on or over it (Hall, 2001).

7 Other = any additional behaviour performed by birds other than those included in the ethogram. This included wing flapping, disturbing another bird and panting.