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► **To cite this version:**

Manon Fetiveau, M Besson, Valérie Fillon, Mélanie Gunia, Laurence Lamothe. Effects of the living environment on the behaviour of rabbits. EAAP – 74th Annual Meeting, Aug 2023, Lyon, France. . hal-04352655

HAL Id: hal-04352655

<https://hal.inrae.fr/hal-04352655>

Submitted on 19 Dec 2023

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➤ Effects of the living environment on the behaviour of rabbits

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Context and objective

- Societal demand for improving welfare in livestock systems
- Citizens want animals to have access to the outdoor
- 95% of rabbits are raised indoors in wired cages



➔ The trial aimed to study the effects of the living environment (cage vs indoor pen vs outdoor area) on the behaviour of rabbits

Method

- Animals: 477 rabbits weaned at 35 d. (two genetic lines)
- Period : summer 2022 ($t^{\circ} > 40^{\circ}C$)
- Observations: 45, 56 and 66 d., morning and afternoon
- Scan sampling (2 observers)
- Ethogram
 - Locomotion (walking, leaping, running)
 - Maintenance (grazing, eating, resting, gnawing)
 - Exploration (scratching, observing, standing up)
 - Social interaction (side by side, nose to nose)

Control system

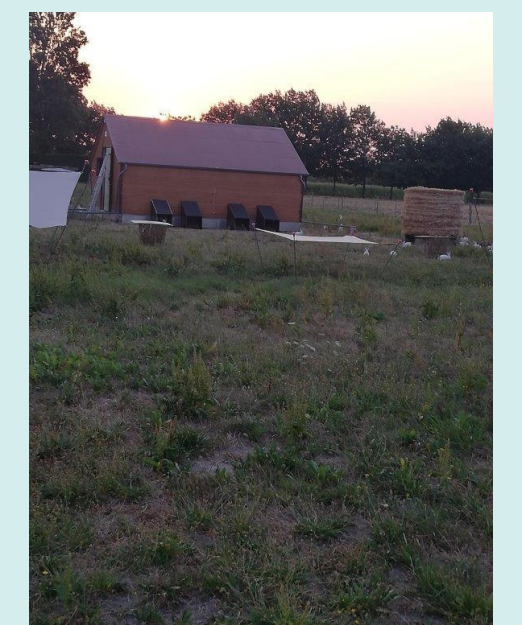
Cages



- Surelevated cages (0.8 m²; 5 rabbits / cage)
- Confined building
- n = 375

Alternative system

Indoor pens Grassy paddock



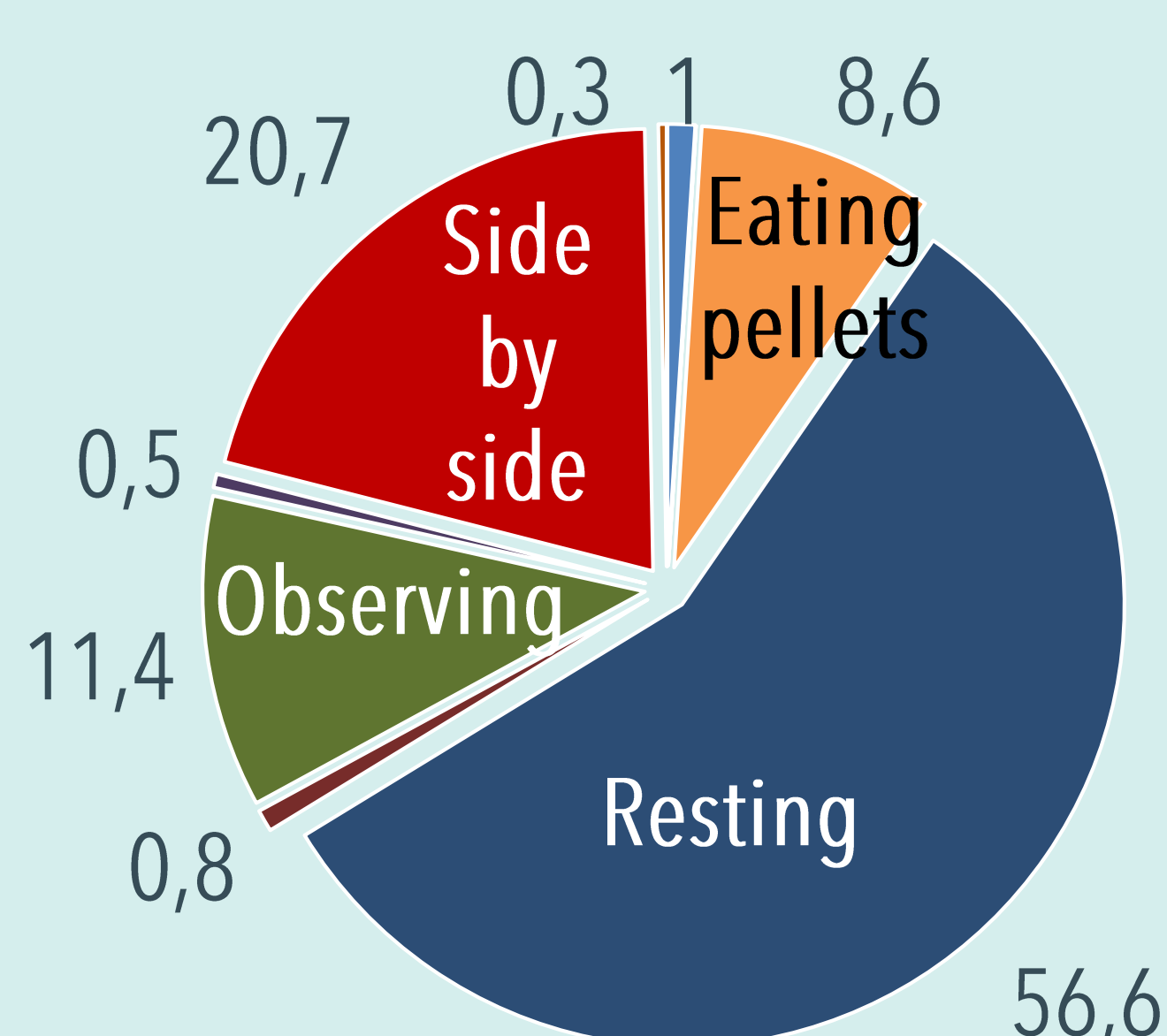
- 8 roofless pens (2 m²) in a mobile building placed on 1940 m² grassy paddock
- n = 102

Results

Behaviour (%)

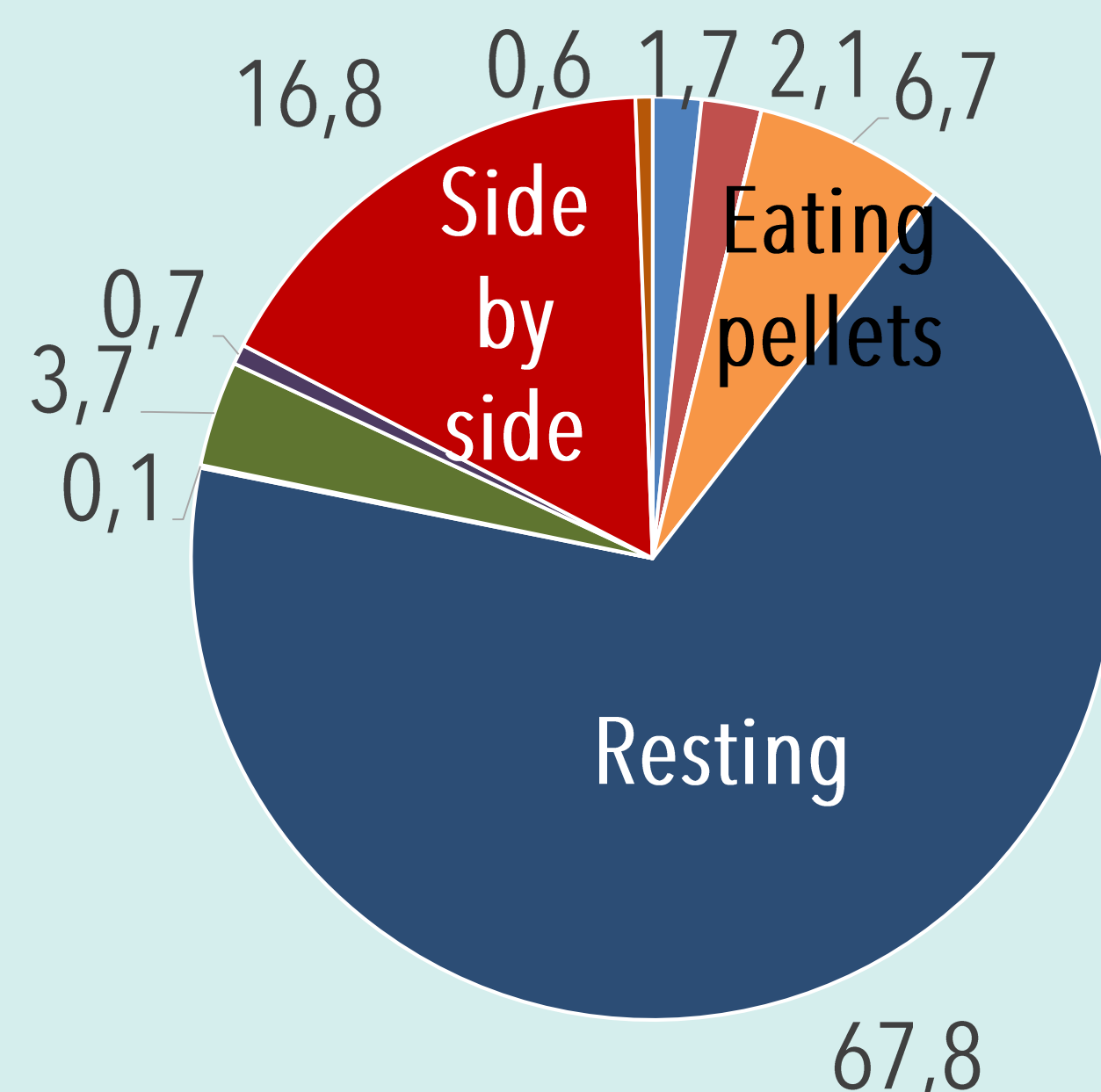
Control system

Cages

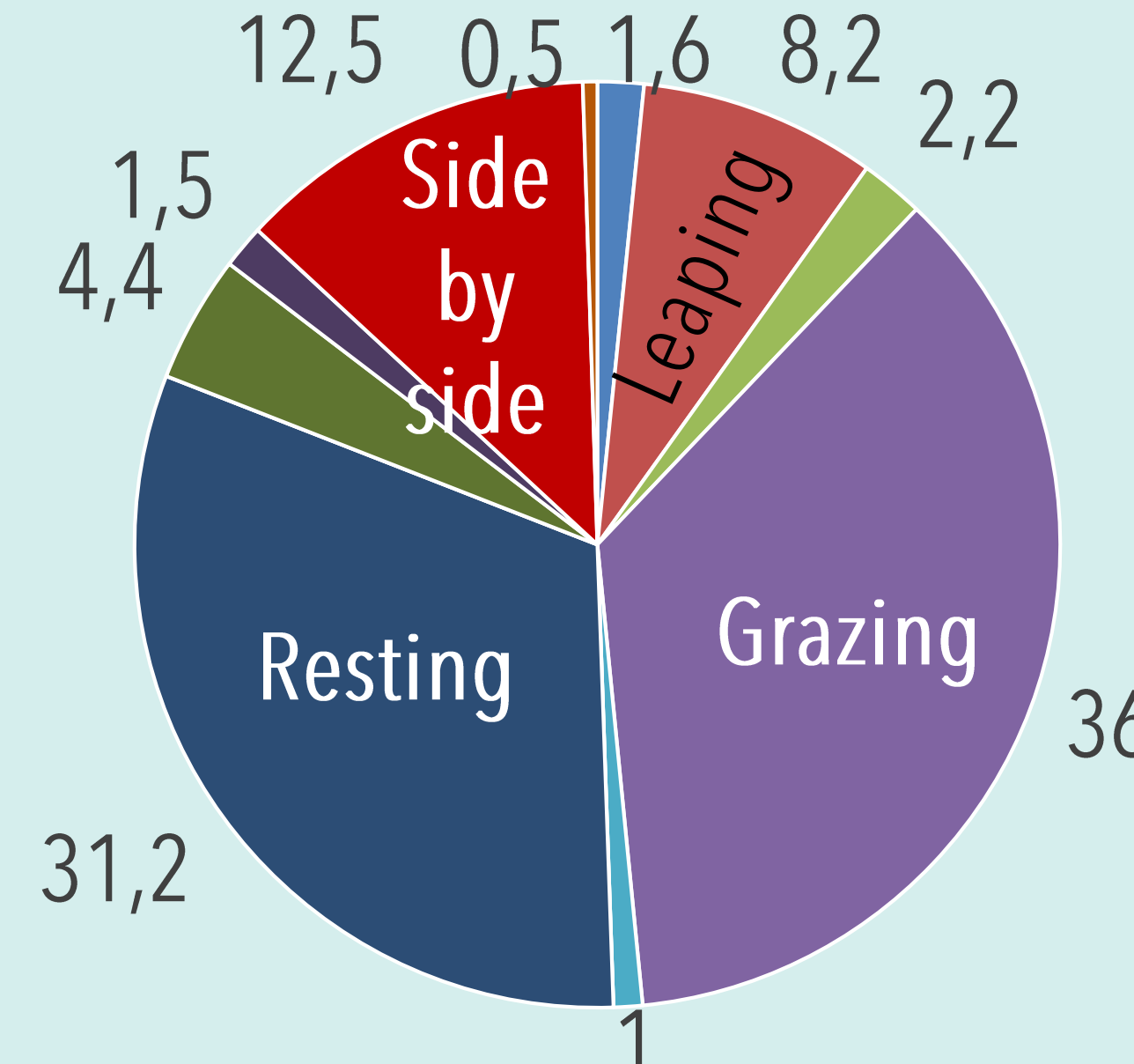


Alternative system

Indoor pens



Grassy paddock



Statistical effects:

- Genetic line: NS except nose-to-nose
- Environment : $P < 0.001$ for all behaviour except walking, side-to-side and nose-to-nose
- Day : $P < 0.001$ except grazing, resting and growing
- Genetic line x environ^t : NS

High mortality : 24 % in the control system vs 49% in the alternative system ($P < 0.05$) due to excessive outside temperature

Conclusion

Access to a grassy paddock enabled

- A diversification of the behavioural repertoire
- A spatialisation of the living environment (differentiated use of space)
- A twilight behaviour
- To satisfy the rabbits' need to graze