



Round Table 2

Rabbit housing - new farming systems with the regulations and social demand?

Chairman: L. Maertens (Belgium)

➤ **France: situation, methods, research, prospects**
Fortun-Lamothe L.

> French rabbit sector

CL!PP

Interprofession du Lapin

An active
interprofession

42%
are
women

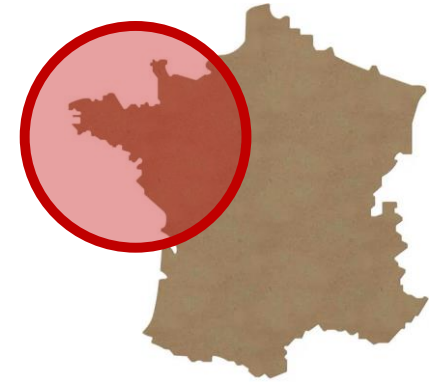
800
Professionals



90%
members of
a producer
group

78% of production in
the West of France

1/3 of farms are
specialized



Slaughter 90% of
production

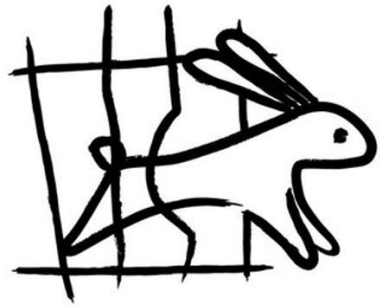
< 20 000 t eq. cc

95% of rabbits
produced in France
are consumed in
France



➤ Regulations and social demand?

➤ Regulation and social demands concerning animal welfare



“End the Cage Age”
European Citizens’ Initiative

**Citizens want the animals
have an access to the outdoor**

➤ Others subject no considered here

- Antibiotic use

- Price and quality : **loi EGALIM in France**

50% of sustainable products, in particular with a sign of origin and quality (SIQO), in meals served in public restaurants* from 1 January 2022

- Alternative systems

➤ Situation in France concerning housing systems

❖ Currently :

≈ 95 % of rabbits housed in cages (50% are polyvalent for “duo management”)

≈ 4 % of rabbits housed in pens, floor pens or elevated cages (platform)

<1% organic production (mobile cages fixed pen on grassland)

➤ The sector had set itself an ambitious objective:

to reach 25% of the production from alternative systems by 2022

The objective will not be met but the situation is changing significantly

➤ Private solutions currently available : for fatteners only !

Indoor system with large ground pens



Photo : CPLB

Lapin et bien
(≈ 15 farms)



Photo : Terra

Cuniloft
(<5 farms)

**Hybrid housing combining
indoor elevated pen
+ winter garden**



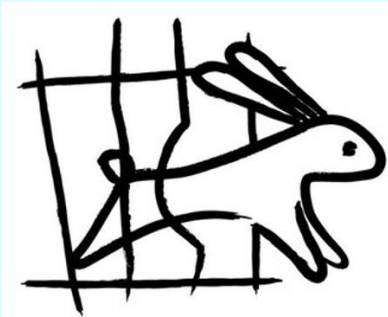
Photo : wisium

Wellap
(1 farm)

➤ No private known solution for females !

For females there is several questions:

- Possibility of « duo management » ??
- Large and enriched housing for jumping, standing up, gnawing....
- Grouping for social interactions



**“End the Cage Age”
European Citizens’ Initiative**

Within the Living Lab Project, NGO people said that **“the grouping of rabbit does” not enter in the “end the cage age” area**

The first step is therefore to offer a more spacious and enriched living environment for the females at an acceptable economic cost

➤ Prospects in the French rabbit sector

EVALAP Project = state-funded recovery plan

Development and deployment of an interprofessional
charter of good practices in rabbit farming

welfare + hygiene (→VHD)

➤ Research projects at INRAE on welfare subject

➤ Explore a gradient of system

- ❖ Indoor → outdoor
- ❖ Specialized livestock systems = farms for meat production only to
- ❖ Agroecological systems: integrated crop-livestock integration for additionnal services to meat production

➤ Implements various research approaches

- ❖ Disciplinar research projects
- ❖ Pluridisciplinar research projects
- ❖ Open innovation = with non academic partners



➤ Research projects at INRAE : indoor ground pen (under consideration)

For genetic studies



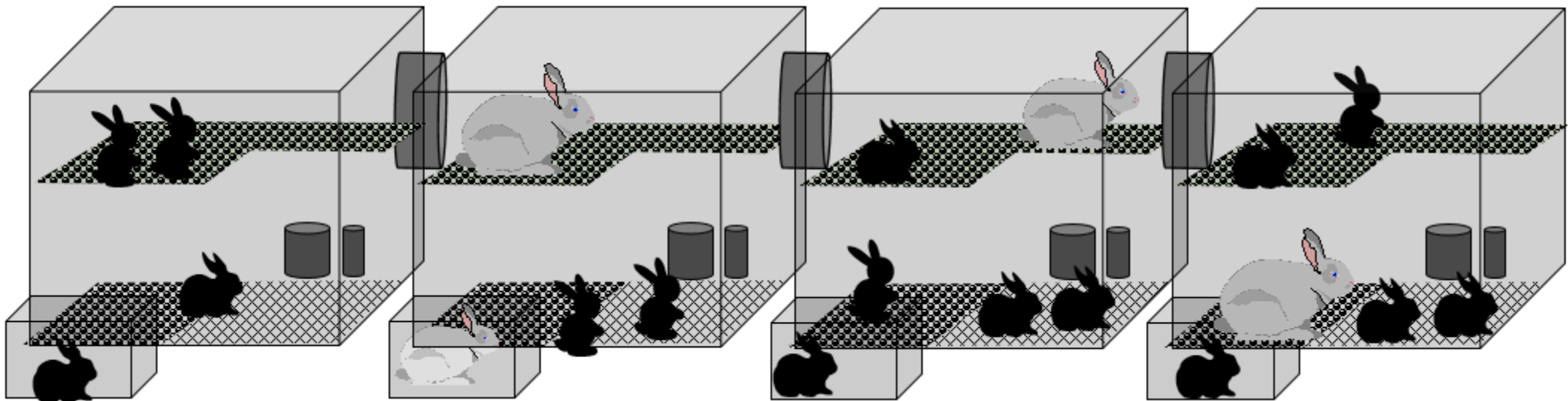
For fatteners



Photo L. Maertens

➤ Research projects at INRAE : indoor large partitioned pens

Four individual housings connected via hatches



**For fatteners and
reproductive females**

➤ Research projects at INRAE : indoor large partitioned pens



Improved natural behaviours

- ✓ Stand up
 - ✓ Gnawing
 - ✓ Jumping
 - ✓ Hiding
-
- ✓ + Comfort (floor)
 - ✓ Compatible with « duo management »
 - ✓ Easy transformation from individual to group housing

Currently tested in commercial farms with « duo management » in the Living Lab Lapin project

Is it a cage or not ??



“End the Cage Age”
European Citizens’ Initiative

➤ Research projects at INRAE : with outdoor access

Currently for fatteners only



Photo : M. Fetiveau (inrae)

See poster tomorrow: Fetiveau et al.

Fetiveau et al., 2021. Effect of access to outdoor grazing and stocking density on space and pasture use, behaviour, reactivity, and growth traits of weaned rabbits. *Animal*, 15 : 100334

See poster tomorrow

Improved natural behaviours

- ✓ **Grazing**
- ✓ Stand up
- ✓ Jumping
- ✓ Running...
- ✗ Climatic cumfort
- ✗ Parasitism ??? (weak effect for the moment)

➤ Research projects at INRAE : with outdoor access

Four experimental groups:

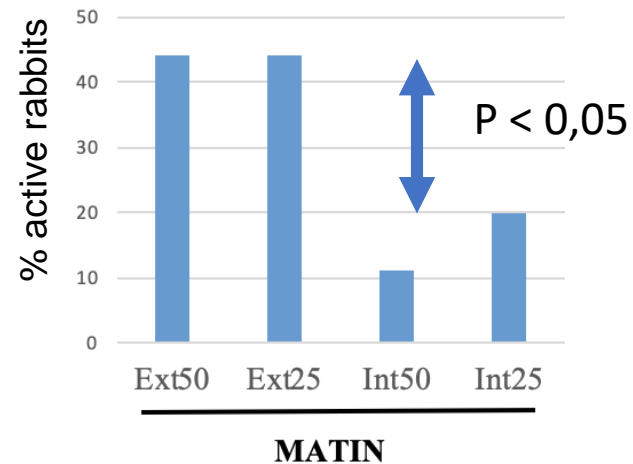
Group size (50 vs 25)

Access to outdoor : Yes or no

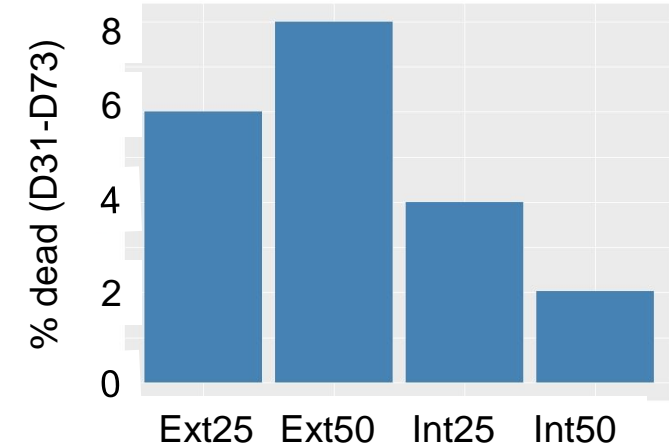


Photo : M. Fetiveau (inrae)

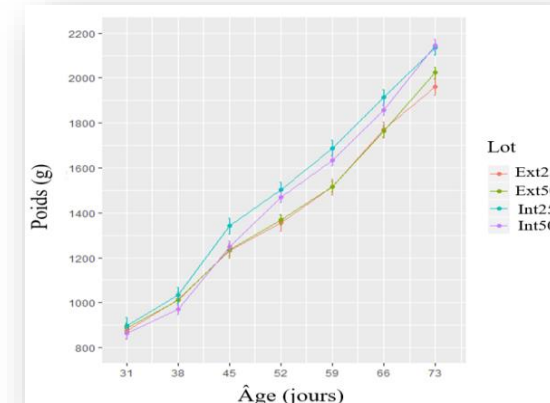
❖ Behavior



❖ Mortality ($P < 0.1$)



❖ Growth



Effect Density ($P < 0,05$)

Effet Outdoor Acces ($P < 0,05$)

➤ Research projects at INRAE : studies on organic production



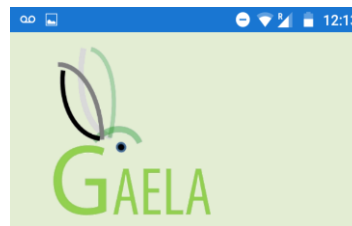
Photo : T. Gidenne



Photo : T. Gidenne



Photo : T. Gidenne



Studies on farms or experimental unit by T. Gidenne et al.
concerned feeding, health and performance (smartphone application developed)
but not animal welfare

➤ Research projects at INRAE : integration tree-livestock apple tree-rabbit

Project in progress by Savietto et al.



Mobile cage



Fix pen

Two housings testes

Services evaluated : meat production, Weed control, soil fertility, animal welfare, etc.)

Possible dis-services: rabbit damage on apple trees, attraction of predators, disease for rabbits (copper poisoning)





Thank you for your attention