

A descriptive study of rearing procedures in western dairy French herds

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The importance of rearing

- **Dairy heifers**

- 40 to 60 % of animals within a herd
 - 18 h / animal reared
 - 1 000 to 1 500 € / animal reared
- } *Estimations from previous observations and measures in dairy holstein farms*

- **In addition**

- **Drastic changes over the recent years** (Genetic, Herd size, labor, diversified production systems...)
- **Advances in research** (see Agabriel et al., EAAP, Heifers management: new questions in an evolutionary context)

- **But, recommendations regarding management are 20 / 30 years old !!**



The importance of rearing

- **Plenty of recent studies on practical aspects of herd management for dairy cows...**
...very few on heifers !!!
- **Aim of present study:**
 - Better knowledge of rearing practices within dairy French farms
 - Informations on how advances and recommendations are used in practice by farmers
 - Farmers « feelings » concerning rearing heifers

A focus on dairy heifer herd management systems employed in low lying plain zone, the Pays de la Loire Region

Materials & methods

- **A questionnaire (15-20 min), from Nov 2009 to March 2010**
- **9 core themes, 36 questions (several forms)**
 - Part 1: main defining features of farm and local environmental position
 - Part 2: production (calving, weaning, reproduction...)
- **449 farms** involved, by **117 technicians** from **French Livestock engineering agencies** involved in milk production and/or animal growth

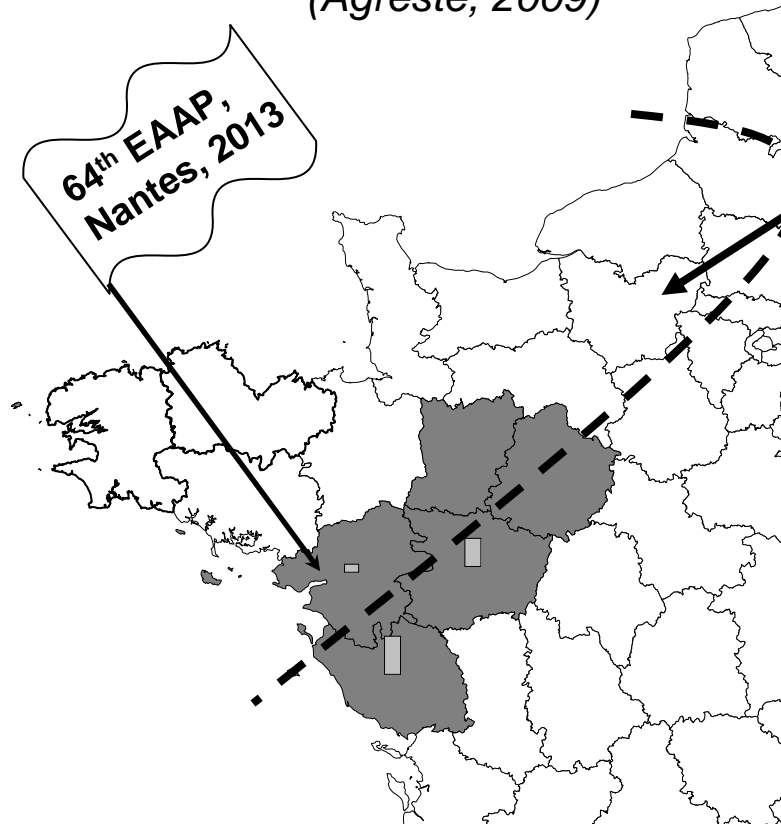
Results

Pays de la Loire

15 % French production, 3.5 billions l/yr

West of France: (*including Pays de la Loire, Brittany and Normandy*): 50 % production of National production

(Agreste, 2009)



Selected sample

18 to 138 dairy cows (47 on average)

5 097 to 11 918 kg/cow/lactation (7 953)

64 % of herds exclusive Ho, 14 % No, 3 % Mo (others = *crossbreeds and several breeds*)

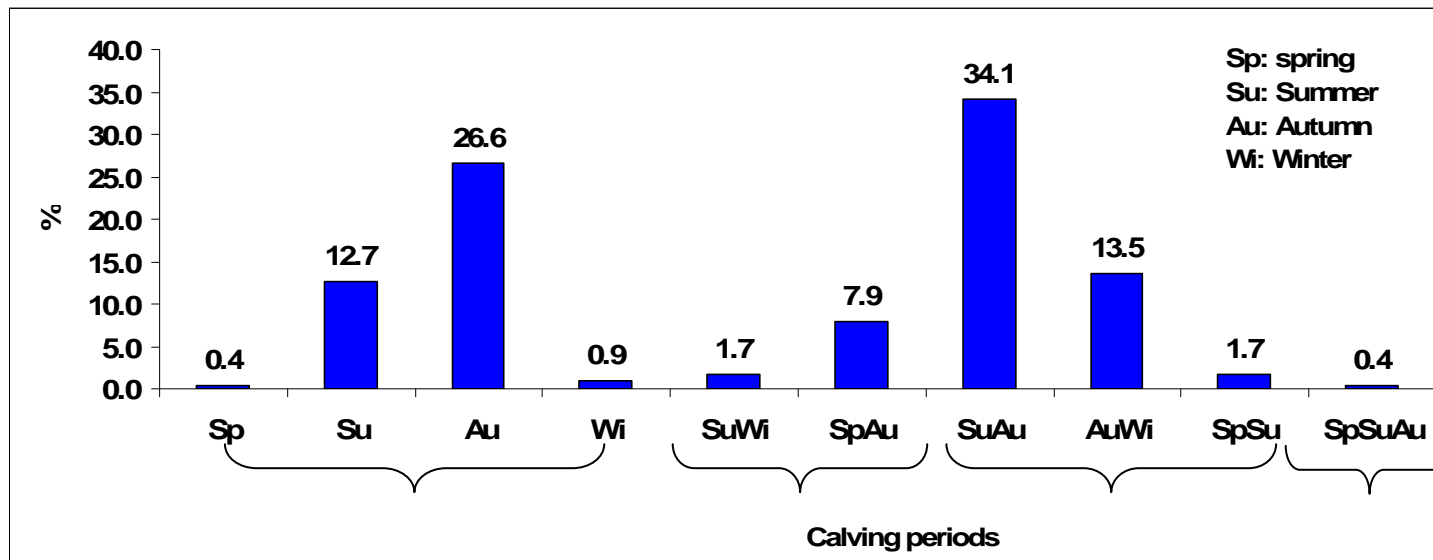
2/3 of herds = another livestock operations (pigs, chickens...)

1 to 7 full-time workers

Classical cares for heifers management

- **Group management in most cases:** easier with homogeneity (BW, age)

Farms employing a batched calving strategy (n = 229)



Calvings during Su /Au or (Su +Au): more than 70 %

Heifers management before weaning

Colostrum

53 % of calves **separated** from mother **immediatly** after birth

(exposure to pathogens; initial veterinary care, colostrum feeding under control vs welfare, socialisation behaviour)

2.2 l colostrum rapidly (bucket / bottle: 48.4 / 50.4 %; 1.2 %: stomach tube)

Milk feeding phase

Whole milk (258) / milk powder (149) / combination (36)

98 % natural form

Complementation

Concentrate and fodder (straw / hay)



Heifers management before weaning

- **Dehorning: 96 % of herds**

- **Hot iron dehorning** (87 %) or chemical paste (11%)
- **1.6 (\pm 1) mo of age**, 25 % after 3 mo
- No local anesthetic / painkillers in most cases



- **Weaning**

- **2.9 (\pm 0.7) mo of age** in 72 % of case
- 31, 38 & 31 % at less than 2.5, 2.5-3.5 and >3.5 mo of age respectively
- **37 % of case: BW (105 \pm 16 kg)**

Heifers management after weaning



- **Post-weaning**

- Pasture grazing: 8.9 (\pm 3.1) mo of age
- 82 % reared in groups (age / BW)
- Special plots, reserved and adapted to age of animals

- **Reproduction**

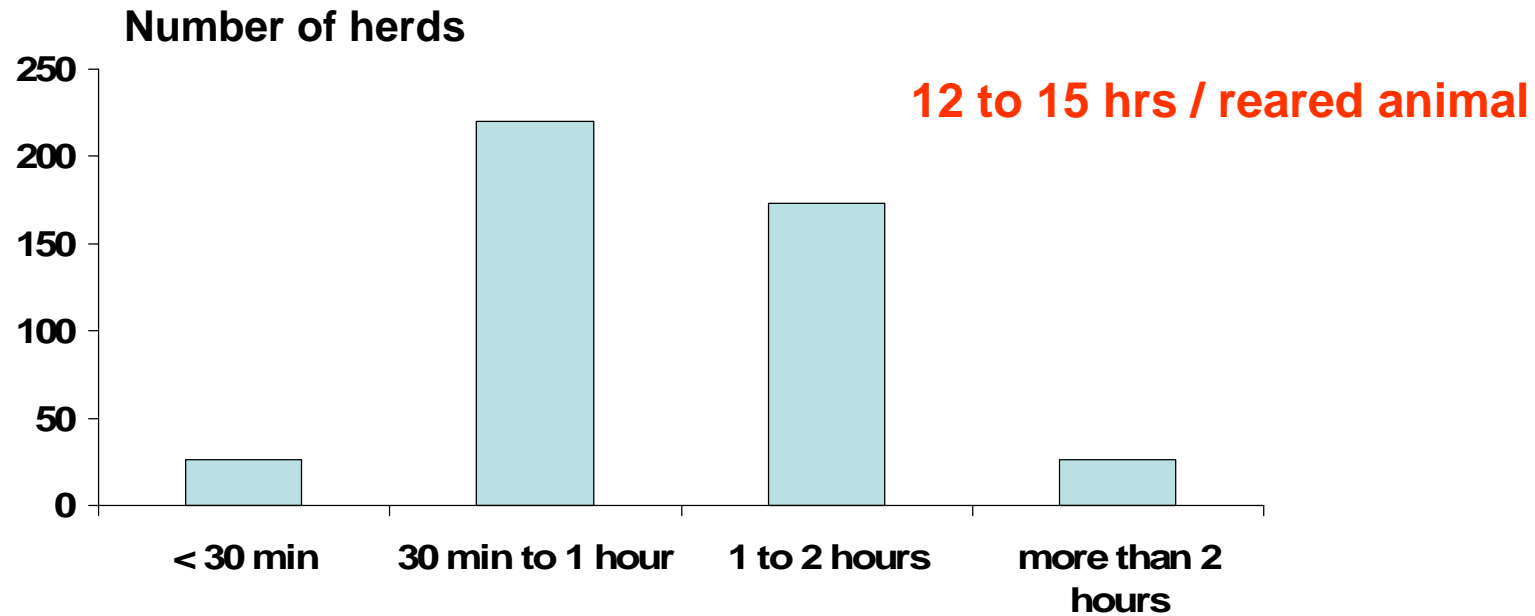
- Muticriteria decision (weight alone or combined: 310 farmers)
- 98 % : heifer detection visually

- **At 1st calving**

- Age: 24 (43.5 %), 30 (41.9 %) and 36 mo (10.2 %) (earlier in Ho)
- BW: at least 580 (12.2), 610 (34,0) or 630 (21.5%) kg

But very few weighted their animals !!!

Farmer-estimated daily spent on heifer care and rearing (n = 445)



Daily time spent to take care of heifers according to farmers
(*main answer*)

61.5 % of farmers: it is a necessity

36.4 % of them: they enjoy

2.1 % of farmers: it is a chore !!!

General conclusion

- **Less interest for heifers management / cows**
 - Long-term effects not known ?
 - No rapid return on-investment ?
 - Lack of technical skills ? Advices ? Too expensive ?...
- **But today's production: reducing all production costs, including rearing costs:**
 - Reducing non-productive days, i.e; decreasing age at 1st calving (< 24 mo ?)
 - Better control of animal growth

As in other countries: more appropriate management would result in improved production, breeding and general performances