

# Patterns and determinants of **contacts** between traditional free-ranging **pig herds** perceived by farmers in **Corsica** Island. Implications for disease transmission

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## CONTEXT

- Pig production based on traditional **extensive free-range** farming systems, using agro-sylvo-pastoral resources of mountainous areas to feed **local breed** pigs and produce high value pork products<sup>1</sup>
- Some management practices may increase the risk of contacts between herds
- Risk of introduction of **African Swine Fever** virus from **Sardinia**, where the disease is endemic since 1978<sup>2</sup>

➔ Understanding **the contact patterns** between pig herds would help to develop effective disease control strategies

## METHODS

- 67 **semi-directive interviews** in the main production areas during spring and autumn 2013
- Questions on **practices**, frequency and period of **direct** (share of pasture, sexual contacts, purchase of pigs) and **indirect** (feeding practices, access to carcass, visitors, share of material) **contacts**



### References:

- <sup>1</sup> Casabianca, F., Maestrini, O., 2001. Elevage porcin et systèmes sylvopastoraux en Corse. Mettre en dynamique la tradition. Pastum 61-62, 49-54.  
<sup>2</sup> Costard, S., Mur, L., Lubroth, J., Sanchez-Vizcaino, J.M., Pfeiffer, D.U., 2013. Epidemiology of African swine fever virus. Virus Research 173, 191-197.

## RESULTS\*

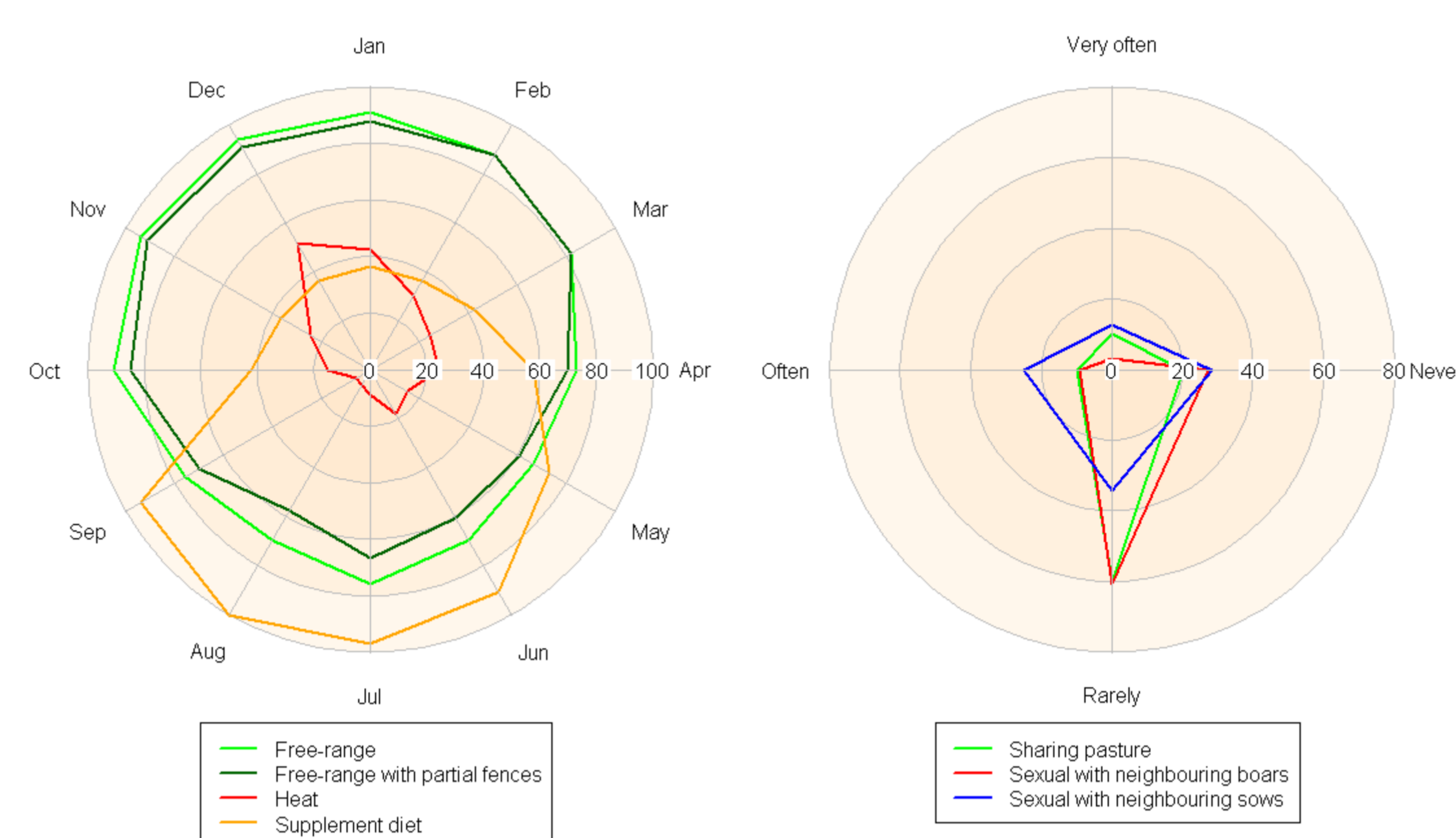


Figure 1. Periods at risk (left) and perceived risk (right) of contacts between pig herds due to free-range management

- **Free-range** occurs **all year** round, mostly on **partially fenced** areas
- The **higher risk** of direct contacts on pastures perceived by farmers is due to their own **boars mating with neighbouring sows**

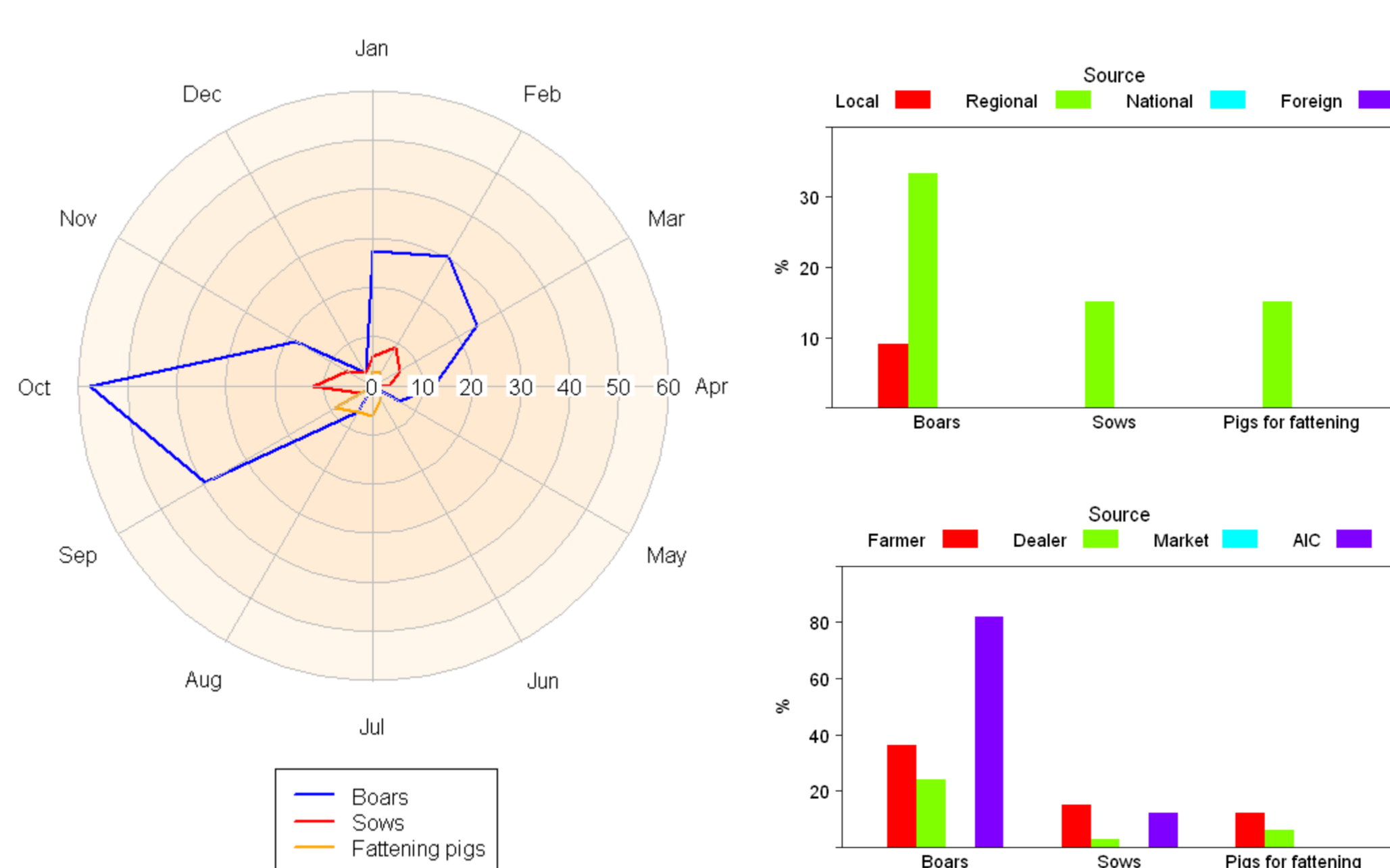


Figure 2. Usual periods of introduction (left) and localisation and type of sources (right) of pigs (local: < 10km; regional: Corsica; National: France)

- The most animals purchased / exchanged are **boars**, at a **regional** level, particularly during autumn and late winter

Table 1. Percentage of positive answers for indirect contacts between pig herds

Risk of indirect contact	%
Pigs are fed with kitchen waste	3
Pigs have access to hunting left-overs	85
Neighbouring pigs have access to pork butchery left-overs	36
Pigs have access to pig carcasses	45
Visitors : health care company & vets	79
Visitors : other farmers	73
Visitors : other (castrator, butcher, ...)	0
Vehicle from feeding company enter the herds	0
Share equipment: trucks for animal transport	24

\* Results based on 33 interviews conducted during spring 2013

## DISCUSSION



- The presence of **reproductive pigs on pasture** might increase the risk of **local** spread of pathogens, particularly during the **heat** season
- The management of **pork left-overs** and **deadstock** might also increase the risk of **local** spread of pathogens
- **Purchase / exchange of boars, sharing** of animal truck and **visits** of farmers and health care person might increase the **regional** spread of pathogens
- Identifying measures to prevent the spread of pathogens requires a **broader understanding** of breeding systems and **farmers strategies**

➔ These factors should be considered to design more cost-effective surveillance and control strategies in this particular context of pig production.