

# Do livestock guarding dogs frighten wolves?

- Complexity of the interactions between two close canine species -



J.-M. Landry<sup>1,3</sup>, J.-L. Borelli<sup>1</sup>, G. Millischer<sup>2</sup>

- <sup>1</sup> Institute for the Promotion and Research on guarding Animals, Ayent, Switzerland
- <sup>2</sup> Parc national du Mercantour, France
- <sup>3</sup> Corresponding author: <a href="mailto:com/">canis.ovis@gmail.com/</a> / <a href="mailto:www.ipra-landry.com">www.ipra-landry.com</a>

#### Introduction

Livestock guarding dogs (LGDs) are one of the last population of dogs still in close contact with their ancestor. Their interactions had never been studied so far and one assumed they were only agonistic. In fact, wolves don't avoid LGDs working areas and even attempt to prey on flocks. Better understanding these interactions would provide the missing keys to improve LGDs selection and efficiency.

#### **Aims & Methods**

To videotape and study wolves – LGDs night interactions in the south of the French Alps with a thermal camera in order to assess wolves responses to encounters with LGDs.

## **Preliminary results**

We spent 161 nights on the field and videotaped 114 wolf sequences of which a third include encounters with LGDs (fig. 1). We identified four types of encounters, each consisting of several interactions. Wolves can wander up to 8 hours through the LGDs working areas. In some cases, LGDs intervene up to 3 hours after a wolf passage.

### Discussion & Prospects

Our preliminary results suggest that encounters between LGDs and wolves are much more complex than expected, certainly because they are close relatives and share the same environment for months (fig. 2). Further researches are still needed to figure out precisely their relationships. This is definitely a wolf conservation issue and one of the goals of the 2017 - 2021 CanOvis Project.

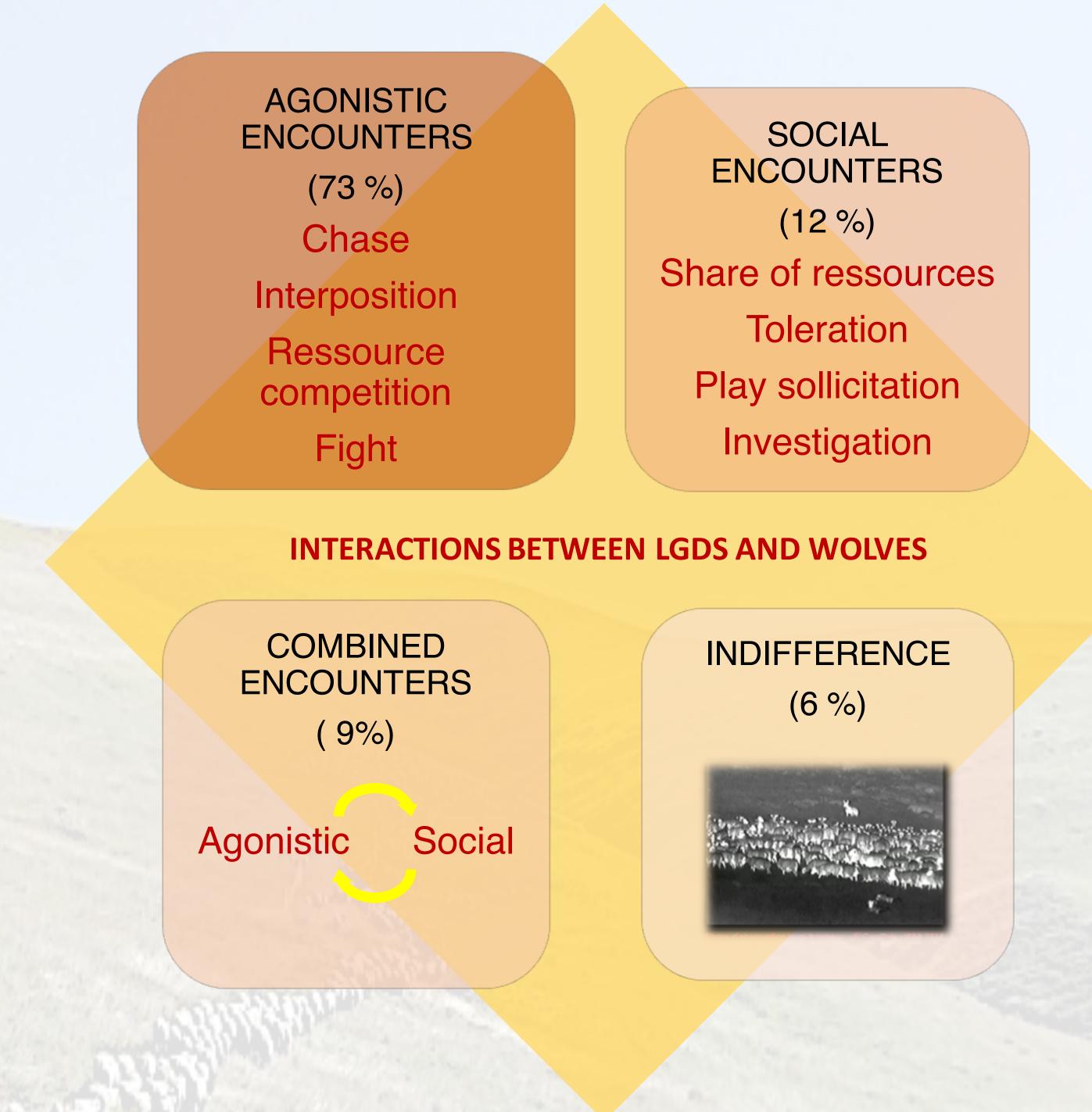


Figure 1: schematic representation of the different types of encounters and interactions between wolves and LGDs.

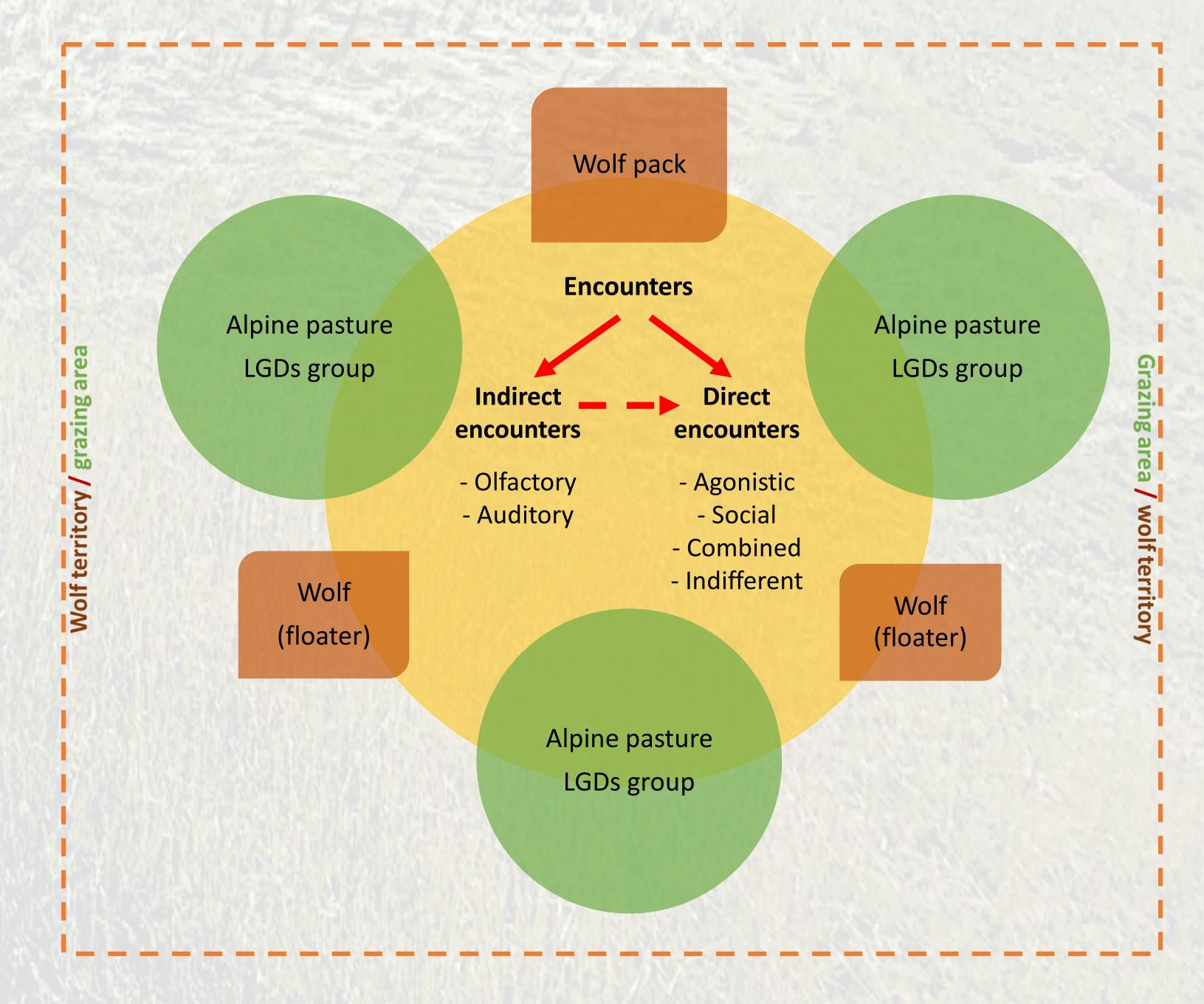


Figure 2: schematic representation of a wolf pack territory, which includes several LGDs working areas and the different types of encounters.