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Michel Meuret, Patrick Verté, Laurent Garde

► To cite this version:

Michel Meuret, Patrick Verté, Laurent Garde. Wolves and livestock in France: situation after 25 years and possible solutions.. Beiträge zur Jagd und Wildforschung, 44, Gesellschaft für Wildtier- und Jagdforschung e.V., 2019, 978-3-7888 -1982-8. hal-02928525

HAL Id: hal-02928525

<https://hal.inrae.fr/hal-02928525v1>

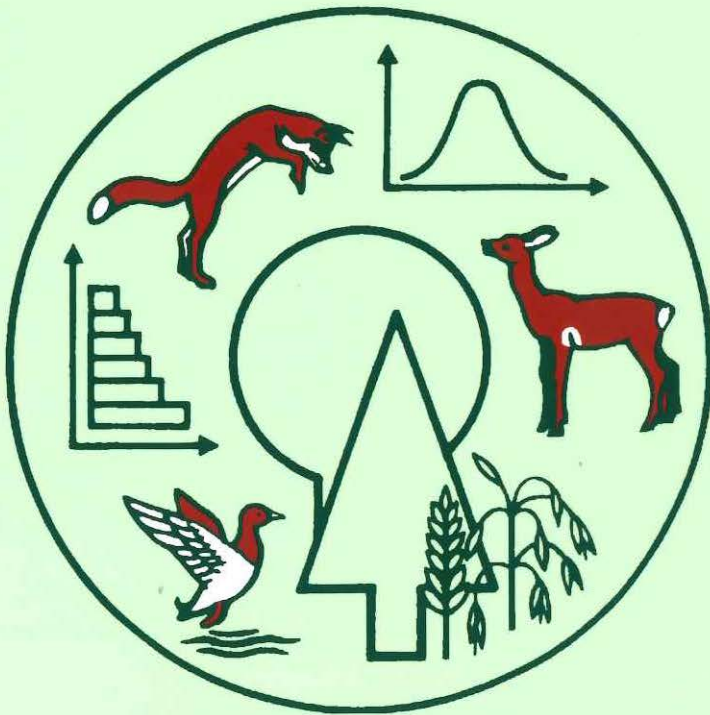
Submitted on 2 Sep 2020

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Beiträge zur
**JAGD
& WILD**
forschung

44



GWJF

**Gesellschaft für Wildtier- und
Jagdforschung e.V.**

MICHEL MEURET, PATRICK VERTÉ, LAURENT GARDE, Frankreich und Belgien

Wolves and livestock in France: situation after 25 years and possible solutions

Key words: wolf, France, livestock

Summary

Scientists of the COADAPHT inter-agency network, founded in 2016 by INRA-SAD, have reviewed 25 years of wolves' presence in France and their impact on livestock farming. Wolves are present in a third of France, with 75 packs, to date all of them in the Alps. The annual number of predated domestic animals has increased linearly over the past 11 years and is apparently a record in Europe despite the elaborate means of protection (livestock guarding dogs, shepherd's assistants, compulsory night pens).

The failure of protection means is obvious as public and private costs are exploding. It seems that wolves in France, as a strictly protected species in a territory occupied by numerous humans, no longer associate livestock with humans, and humans with danger. Experience elsewhere in the world has shown that there is an urgent need to restore a more systematic reciprocal relation, including through targeted lethal regulation, in order to restore a more acceptable relation.

Context and issues

In 1989, France signed the Berne Convention for the Conservation of Wildlife and Natural Habitats in Europe. In 1992, France ratified

the EU Habitat-Fauna-Flora Directive. Among the species classified as strictly protected in France: the wolf. France has therefore made a commitment to the EU to welcome wolf and implement the development of a population of wolves "in a favourable conservation status" on its territory. The first wolves arrived from Italy and settled in the Mercantour National Park, where their presence was only revealed in 1993 once a first pack had already formed. Since then, their population has grown quickly (current estimated growth rate: +20 % per year) and have gained about a third of the country: almost all of eastern France, from Mercantour to the Vosges and Meuse, the Mediterranean basin, but also the south of the Massif Central and the Pyrenees. There were 75 packs (including three cross-border packs) at the end of the winter of 2017–18, all of them now in the Alps. The density of these packs is high and has become comparable to the one of the Greater Yellowstone Ecosystem (USA). The Southeast of France, with its extensive and almost contiguous network of national and regional parks, is an area considered as very favourable to the dispersal and settlement of wolves in Europe. But these areas have also been occupied and managed for centuries by agro-pastoral livestock grazing activities, which has greatly contributed to the development of the biological richness of the landscapes, including habitats

favourable to many other wild and also protected species. Livestock systems in the Southeast of France generally graze year-round, including winter transhumance, in often rugged, bushy and wooded landscapes, making them highly vulnerable to predation. This is why, over the course of successive national “Wolf Plans”, the French State has encouraged breeders to protect themselves, using techniques inspired by countries where wolves have always been present: livestock guarding dogs, security fences,

reinforced human presence, systematic night enclosures. The budget allocated to livestock protection (80 % of their costs subsidized) and compensation for victims now amounts to €30 million per year.

As a result of such efforts, and given the abundance of wild prey and in particular ungulates, has the situation become satisfactory for farmers? Not at all. The intensity and dynamics of predation on livestock farms in France remains described as “hotspot” by EU experts.

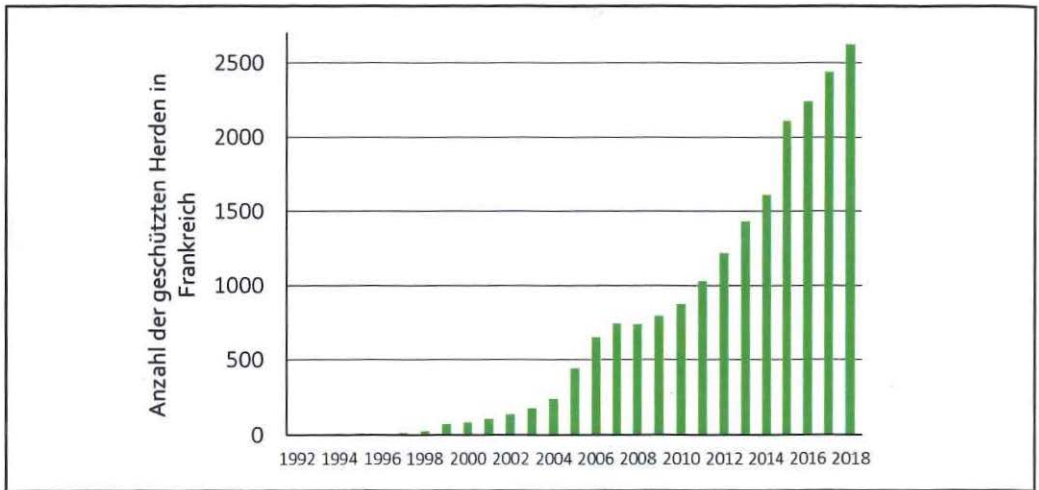


Fig. 1 Number of protected herds in France (Source: DRAAF Auvergne Rhones Alpes). “Protected” means a signed contract for the implementation of at least two livestock protection measures.

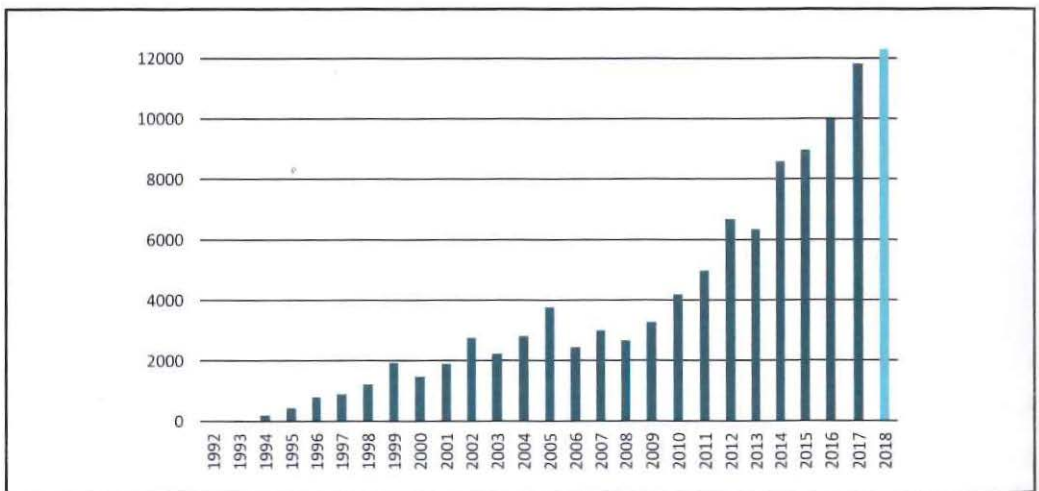


Fig. 2 Number of livestock (all species) killed and recovered following attacks attributed to wolves in France

Today, 92 % of wolf damage remains concentrated in the French Alps and Provence departments, where however almost all farmers have adopted the means of protection for years. How to explain it?

Results

With about 500 wolves now occurring in a third of metropolitan France, predation nowadays

causes nearly 15,000 livestock victims per year (sheep, cattle, goats, horses etc.), if we also count the animals that have disappeared and those victims of attacks. This is apparently a record in Europe, according to the data available for EU countries. In addition, the number of victims in France has increased linearly over the past 11 years: +1035 animals killed per year, every year. Predation therefore has a strong impact on agro-pastoral livestock systems, whether in the mountains, hills or even

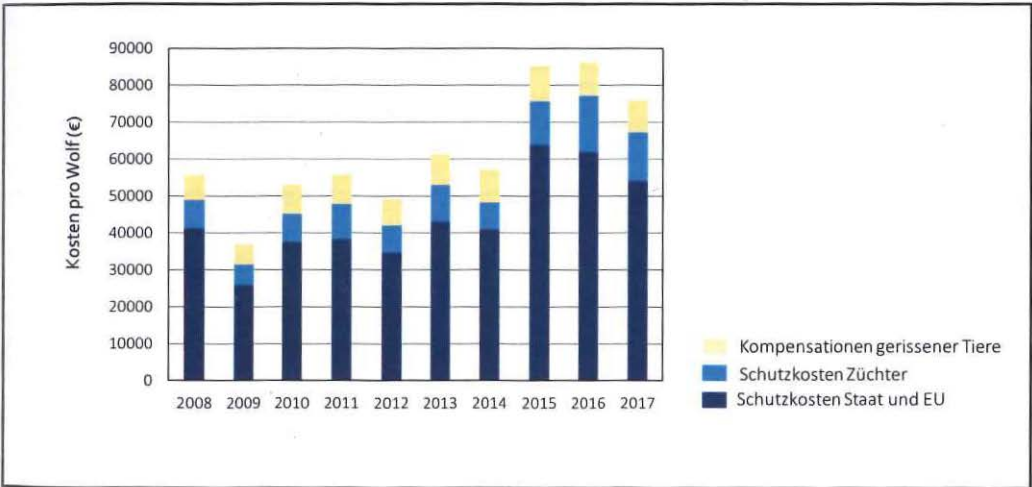


Fig. 3 Mean yearly cost of an adult wolf in France. Yellow: compensation for the killed livestock. Dark blue: cost of the protection measures, part financed by the public authorities. Light blue: cost of the protection measures, part paid by the livestock breeders. Source: DREAL Auvergne Rhone Alpes, ONCFS

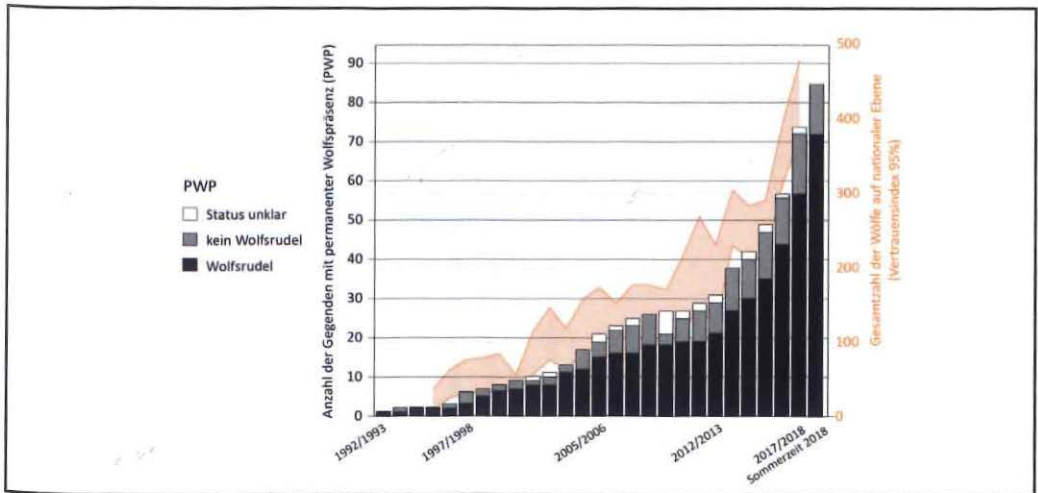


Fig. 4 Left: Number of permanent wolf presence units (black: wolf pack - grey: no wolf pack - white: unclear status). Right: estimated wolfes population in France (95 % confidence interval). Source: ONCFS

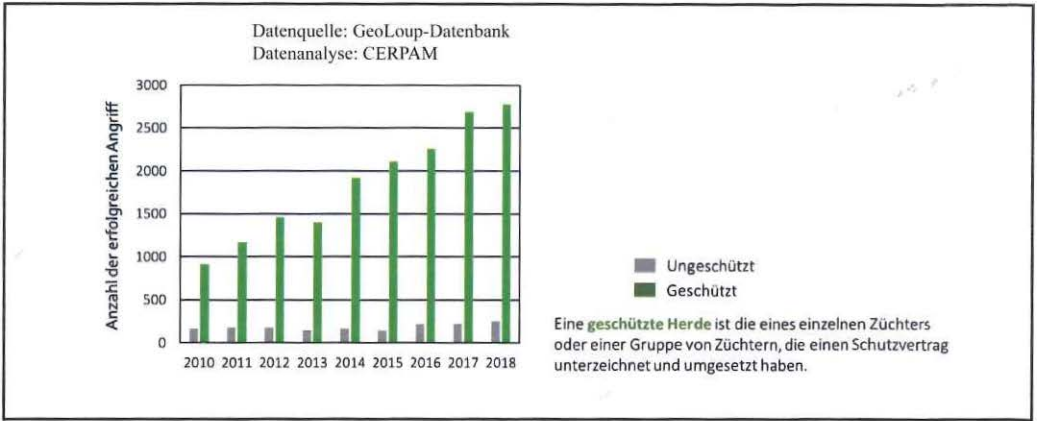


Fig. 5 Number of succesfull wolves attacks on livestock. Grey: unprotected herds. Green: protected herds. A herd is considered as "protected" when a protection contract has been signed and implemented. Source: GeoLoup Database. Analysis: CERPAM

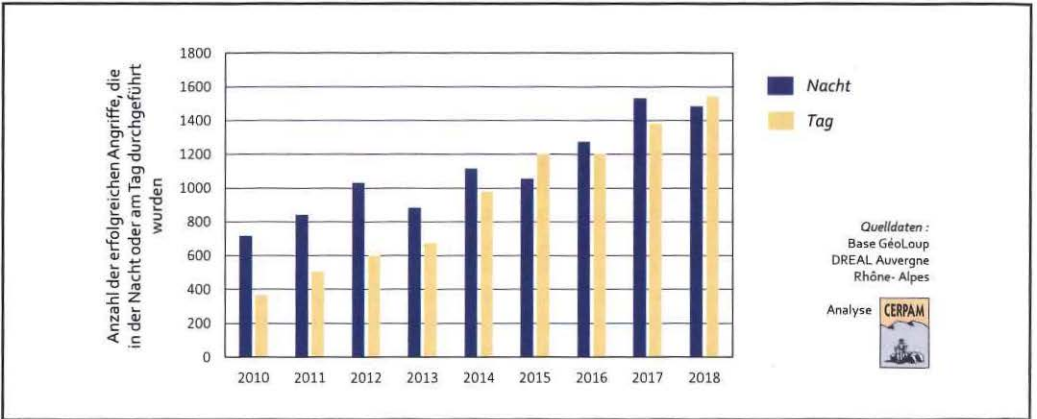


Fig. 6 Number of wolves attacks operated at night (blue) or during daytime (yellow). Source: Geoloup database, Data analysis by Cerpam.



Fig. 7 Elimination of wolves by various shooting modalities

on the plains. In the French Alps, an area where wolves have been present for 20 to 25 years, more than 90 % of successful attacks take place in farms that have adopted the recommended means of protection. Over the past decade, attacks have also occurred increasingly close to farms, villages and roads, night and day, and even in livestock night pens. According to the researchers, the reason is to be found in the very smart, opportunistic and particularly adaptable nature of these predators. Wolves are highly opportunistic, especially when placed under the legal status of a strictly protected species.

Over the years, they have learned to bypass the means of protection, and especially not to fear humans generally not authorized to repel them with a rifle. This situation leads either to the abandonment of too vulnerable areas that have been grazed for a long time, or to an important increase in the means of protection, such as the accumulation of livestock guarding dogs (up to more than 10 dogs per farm), which often makes these areas inaccessible to other users and also causes great concern to the mayors that have to manage conflicts between livestock guarding dogs and numerous hikers and bikers.

The situation is similar in several other European countries, and even elsewhere in the world, when protected predators no longer consider humans and their activities to be a real danger. It therefore seems urgent to succeed in establishing in France, or to restore, if we consider the scale of the centuries, reciprocal relations with offending wolves, including lethal, prompt and targeted.

Wolves need to fear humans again, and especially those humans working with herds. This would restore meaning and effectiveness to non-lethal means of protection (electrified

fences, dogs, scaring tools, etc.) as a signal to remind of the danger. Without this regulation, the resilience of our livestock grazing systems is profoundly challenged, not to mention the viability of the breeders and shepherd professions.

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Addresses:

MICHEL MEURET¹

PATRICK VERTÉ^{2*},

LAURENT GARDE³

¹ University Montpellier, INRA, SELMET, 34000, Montpellier, France

² Walloon Public Service, Department Agriculture and Nature Studies.

³ CERPAM, 04100, Manosque, France

* corresponding author:

E-Mail: patrick.verte@spw.wallonie.be

Beiträge zur Jagd- und Wildforschung

Aus Wissenschaft und Praxis für Praxis und Wissenschaft

Buchreihe für Ökologie, Bewirtschaftung und Schutz des Wildes

begründet durch Prof. Dr. Hans Stubbe 1961,
fortgeführt und herausgegeben durch die Gesellschaft
für Wildtier- und Jagdforschung e.V.

Die „Beiträge zur Jagd- und Wildforschung“ erscheinen im Auftrag der Gesellschaft für Wildtier- und Jagdforschung e.V. einmal jährlich in Buchform (2019 Bd. 44). Sie dokumentieren neueste Ergebnisse aus allen Bereichen der Wildforschung. Es werden aktuelle Erkenntnisse zur Biologie, Ökologie, zum Management und Schutz bewirtschafteter und bedrohter Säugetier- und Vogelarten vermittelt. Probleme des Arten- und Biotop- sowie des Umweltschutzes gehen ein in die Berichterstattung und Diskussion auf der Basis fundierter Grundlagenforschung. Beiträge über die Bestrebungen, ordnungsgemäße Wildbewirtschaftung, Waldwirtschaft und Agrarlandnutzung in Einklang zu bringen, nehmen dabei einen wichtigen Platz ein.

Nutzer dieser Reihe sind neben Wildbiologen, Zoologen und Ökologen breite Kreise der Jägerschaft, angewandte Gebiete der Land-, Forst- und Jagdwirtschaft, des Arten- und Biotopschutzes sowie der Veterinärmedizin. Sie wird allen Naturschutz- und Jagdbehörden, Jagdverbänden, Raumplanungs- und Ökobüros sowie zoologisch, ökologisch, land- und forstwirtschaftlich ausgerichteten Institutionen und Fachbibliotheken sowie allen Interessierten, die Ökologie, Naturschutz, Wildnutzung und Jagd als Einheit modernen Wildtiermanagements sehen, zum Bezug empfohlen.

Für eine weidgerechte Jagd und wissenschaftlich begründete Wildbewirtschaftung, die Nutzung und den Schutz von Naturressourcen bietet dieses Fachjournal wichtige Hintergrund- und Basisinformationen.

Eine Mitgliedschaft in der Gesellschaft für Wildtier- und Jagdforschung ermöglicht das aktive Mitwirken bei der Gestaltung und Umsetzung dieses Ideengutes.

Gesellschaft für Wildtier- und Jagdforschung e.V.

Geschäftsstelle:

Domplatz 4

D-06108 Halle/Salle

Tel.: 0345 - 55 26 453

Fax: 0345 - 55 27 314