



Predation Conference

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Is a More Peaceful Coexistence Between Livestock and Wolves Possible?

(Translated from French)

Michel Meuret

PhD, Research Director at INRAE, UMR Selmet, Montpellier



More Peaceful Coexistence

Does Not Mean **Tranquility**

For **11,500 years**, since livestock were first domesticated, **wolves** have been a **source of nuisance** to varying degrees: animals killed or injured, extra work and costs for protection, and risks to human safety.

Adapted from Lescureux 2017



Credits: David Badke, "Medieval Bestiary",
Victoria, British Columbia, Canada.

More Peaceful Coexistence

Does Not Mean **Tranquility**

Over the centuries, breeders have devised and adapted **various means of protection**: guard dogs, night pens, reinforced human surveillance...



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More Peaceful Coexistence

Does Not Mean **Tranquility**

Over the centuries, breeders have devised and adapted **various means of protection**: guard dogs, night pens, reinforced human surveillance...

Simultaneously, humans exerted **constant pressure** on wolves, **killing** those who attacked their herds of flocks.

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Credits: David Badke, "Medieval Bestiary"



"Bergers défendant leur troupeau" (extrait)
Jacques Callot, 1630.
Credits : gallica.bnf.fr

Recent Presence of Wolves in Continental France ...

Nearly everywhere

Late 18th century



Source: de Beaufort 1987

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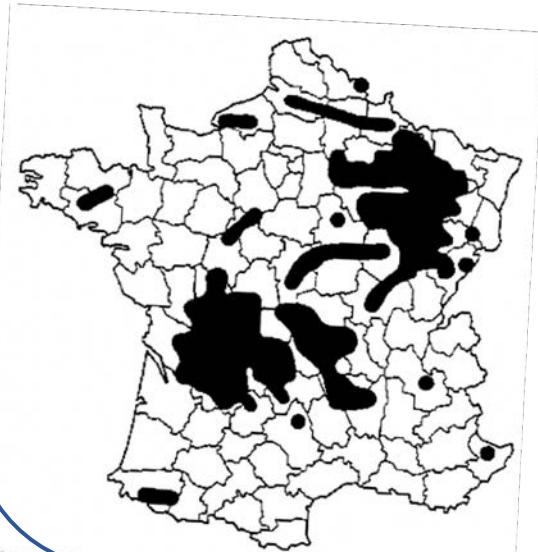
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State-organized eradication (as in many other countries in the Northern hemisphere)

Late 19th century



~ 1923



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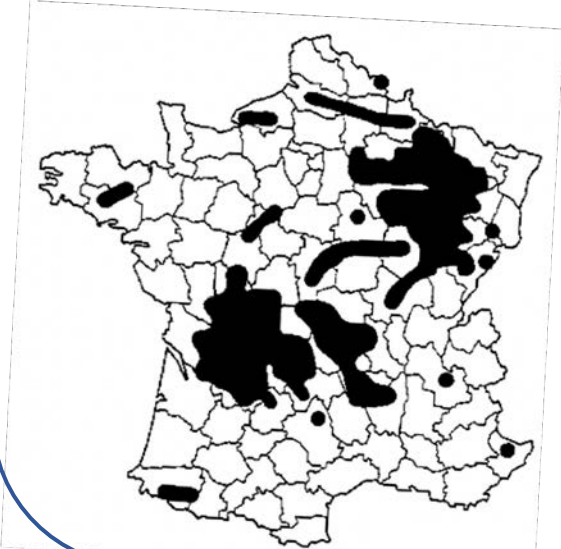
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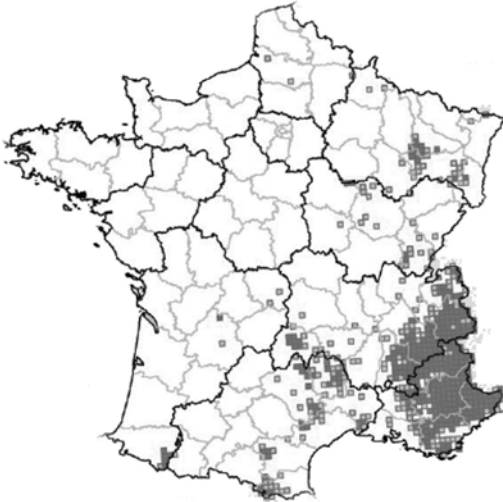


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Back...

1993 - 2020



Source: de Beaufort 1987

Source: OFB 2022

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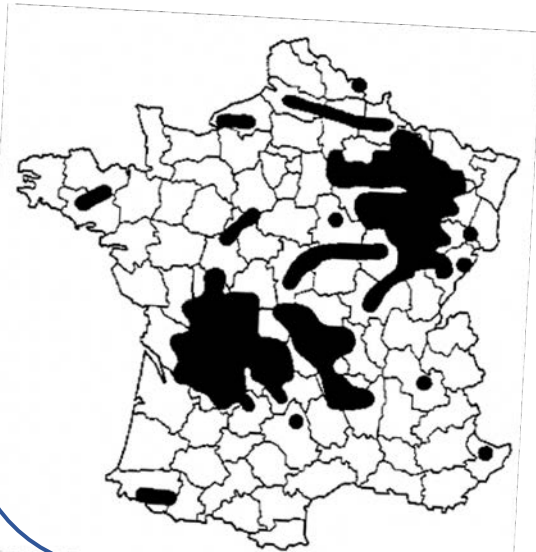
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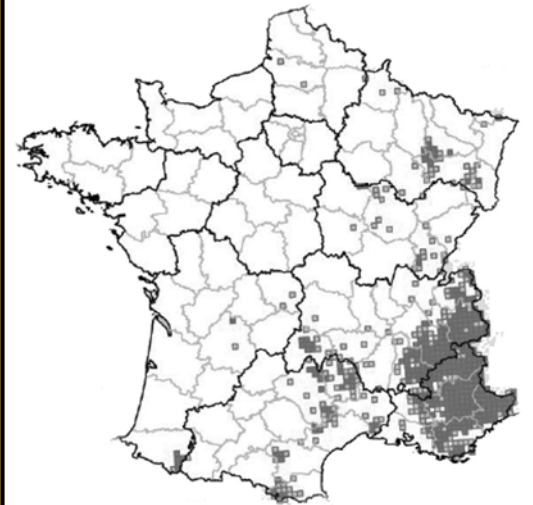
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A century of absence

Back...

1993 - 2020



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This Return After a Century of Absence ...

Comes at a time when, in France, **we have lost memory** of the **best practices** for maintaining **relations with wolves** to coexist in a way that is acceptable to all ...



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In a country where the **population** has become overwhelmingly **urban** or **rurban** and farmers a near rarity (*Survey by Insee: 1.5% of national employment in 2019*)



This Return After a Century of Absence ... (continued)

Impacts on **activities** that have **developed in the absence of wolves**: livestock grazing within fenced pastures and/or with shepherds, hunting and various outdoor leisure activities

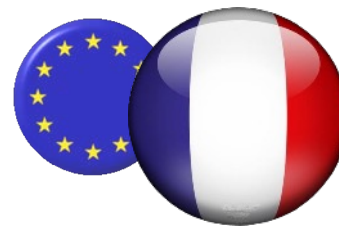


This Return After a Century of Absence ... (continued)

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When the species has just been **granted strict legal protection status**



Early Years in **Secret**



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When unusual damage to herds was reported in Alpes-Maritimes and Var before 1993: **"It's all due to stray dogs!"**

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In Europe, wolves whose behavior surprises when it doesn't fit the ideal "Wild" model are referred to as **atypical individuals**



Görlitz, Germany
2019

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... would probably not withstand the **ability of wolves** to move from one area to another

... would create **problems of distortion** of competition between regions.



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The **solutions** lie in a much better recognition of:

- Wolves' **great intelligence**
- Their **adaptability** to a wide variety of habitats and living conditions (Mech and Boitani 2003)
- The **dynamic nature** of the **relationships** with us (Lescureux et al. 2018; Meuret et al. 2021)

The basics ...

How do wolves choose prey?



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Level of risk to search for and harvest prey



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At the risk of **skyrocketing protection costs** (already > €30 million per year) ... not to mention the **cattle and horses** soon to be protected too.





Sheep night pen, farmer's camera trap - Germany 2020

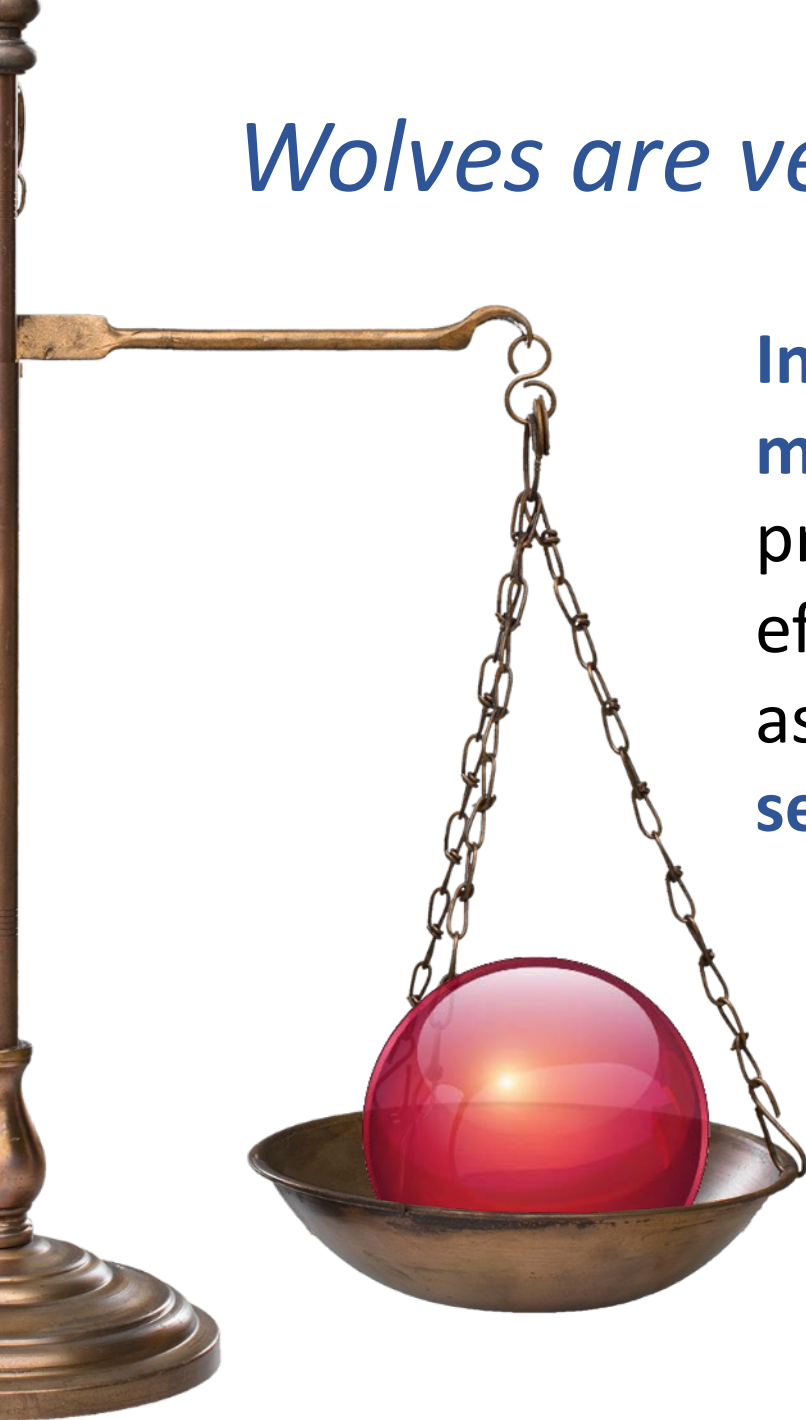
Sheepfold fitted out by the breeder for better protection in
Alpes-Maritimes



Photo Credits: Frédéric Nicolas, INRAE 2022

Wolves are very smart: let's make the most of it!

Increasing the number of obstacles makes no sense as long as these predators do not consider their efforts to overcome or bypass them as potentially putting them at **severe risk: serious injury or death.**



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We need to re-establish a **reciprocal relationship** with wolves, based on **clear signals** and **understandable rules**.



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Getting rid of **bold wolves**

Explicitly associate the presence of **humans** living close to herds or flocks with **danger**



Trying to appease coexistence ...

Main adjustment to be made



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Humans in charge of herds or flocks should be allowed to defend their animals by **shooting without having to wait until several attacks have already occurred on their place** (Meuret *et al.* 2021).

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At present, unfortunately, authorizations to shoot are only granted to breeders by local administrative authorities after the wolf or wolves have experienced what is known in **behavioral ecology** and human psychology as ... **”Positive Reinforcement”**

Positive Reinforcement = ?

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Method used to create, maintain and/or provoke desired behaviors

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Encourages and **rewards** efforts and little progress made by young children ... or domestic animals



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Encourages and **rewards** efforts and little progress made by young children ... or domestic animals

Negative reinforcement means doing the opposite



Current derogatory shooting = unclear



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1st
attack



Current derogatory shooting = unclear

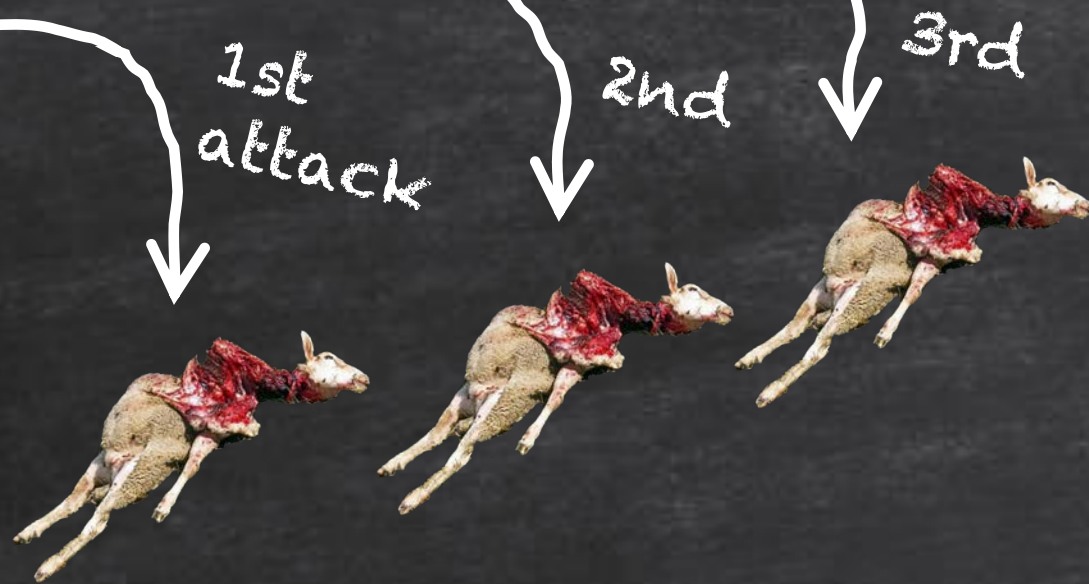


1st
attack

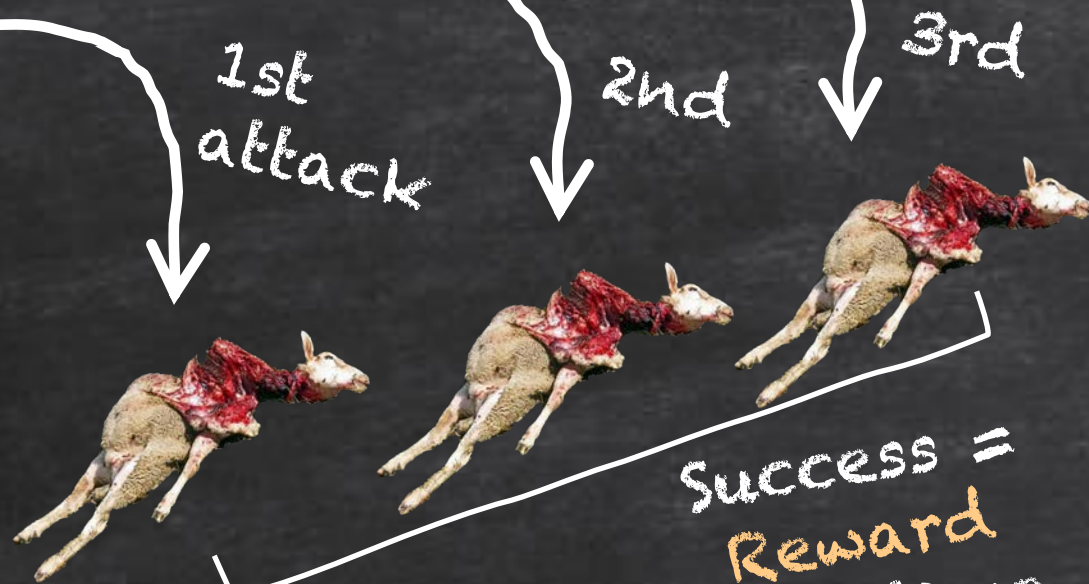
2nd



Current derogatory shooting = unclear

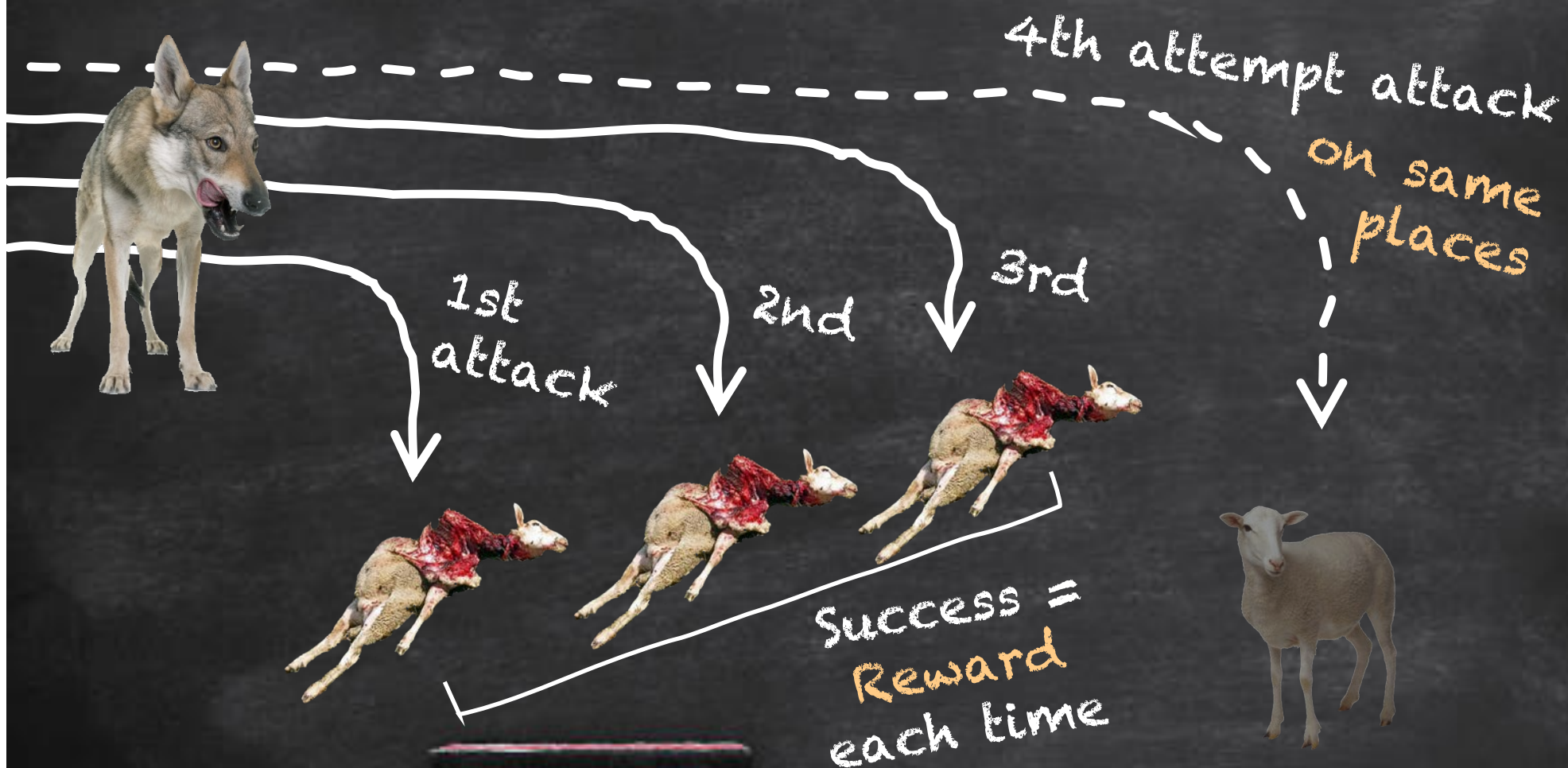


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Success =
Reward
each time

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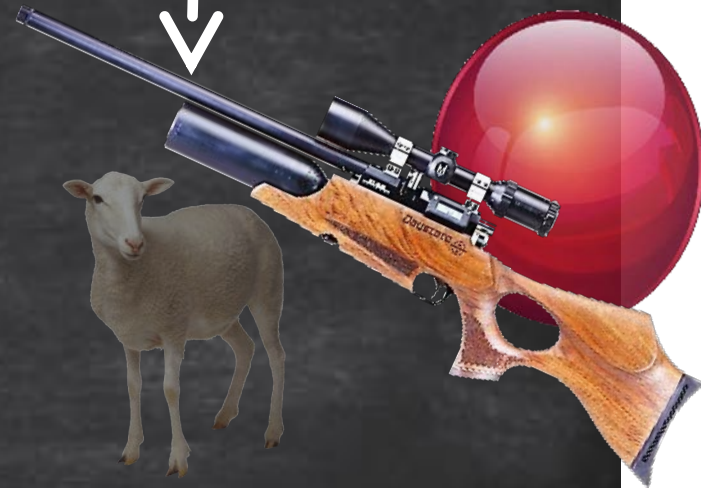
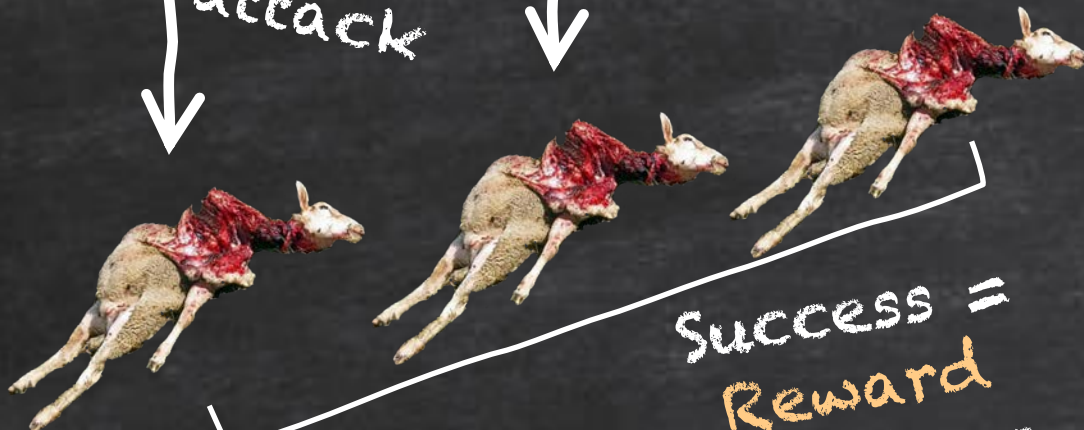
4th attempt attack
on same
places

1st
attack

2nd

3rd

Success =
Reward
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Make the signal understandable by wolves:

Non-lethal and possibly **lethal** means should be **combined from the outset**

Trying to appease coexistence ...

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Réseau de chercheurs
COADAPHT

INRAE

Make the signal understandable by wolves:

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IF



THEN



IS ALSO PROBABLE

Trying to appease coexistence ...

Main adjustment to be made



Make the signal understandable by wolves:

Non-lethal and possibly **lethal** means should be **combined from the outset**



As a result, **non-lethal means** (electrified fences, guard dogs, etc.) should **become more effective ...**

Trying to appease coexistence ...

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Make the signal understandable by wolves:

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As a result, **non-lethal means** (electrified fences, guard dogs, etc.) should **become more effective ...**

... no longer as supposedly impenetrable barriers, but as **warning signs of danger in the event of non-compliance.**



Trying to appease coexistence ...



Let's clarify:

It's all about "***Defending the herds***" on farms and local pastures

And **no "*Wolf Hunt*"!**

It's not the breeders' responsibility to manage local wolf densities in France.



"In other countries, things are going better » (with wolves)



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Yes, sometimes... *but it's never peaceful*



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Our feedback from various countries

"In other countries, things are going better » (with wolves)



Yes, sometimes... *but it's never peaceful*

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A less constantly tense relationship occurs when breeders and herders **have long been authorized to shoot wolves** that have **failed to heed their warning signs of danger**: dogs, fences, humans close to the herd or flock.

"In other countries, things are going better » (with wolves)



"The more permission we've had to shoot to protect our animals, the less we've had to do it!"

Photos courtesy of Glenn Elzinga,
Alderspring Ranch, Idaho, USA

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"The more permission we've had to shoot to protect our animals, the less we've had to do it!"

Because wolves and bears know that if they get too close, our guard dogs bark, and we're warned too... and then we can become very dangerous for them.

We respect each other ... but still, we must always be wary."

Is a More Peaceful Coexistence Between Livestock and Wolves Possible?

Yes ... probably, but only by further adjusting our rules and relationships

With 10,000 to 12,000 farm animals still predated each year by wolves in France, we're still a long way off the mark.



<https://coadapht.fr/en>

INRAE

Réseau de chercheurs
COADAPHT

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