

## Italian wolves prefer pork to venison

## December 20 2012

Some European wolves have a distinct preference for wild boar over other prey, according to new research.

Scientists from Durham University, UK, in collaboration with the University of Sassari in Italy, found that the diet of <u>wolves</u> was consistently dominated by the consumption of wild boar which accounted for about two thirds of total prey <u>biomass</u>, with roe deer accounting for around a third.

The study analysed the remains of prey items in almost 2000 samples of wolf dung over a nine year period and revealed that an increase in roe deer in the wolf diet only occurred in years when boar densities were very low. In years of high roe deer densities, the wolves still preferred to catch wild boar.

The results are published in the journal **PLOS ONE**.

The research team related the prey remains in wolf dung to the availability of possible prey in part of Tuscany, Italy - an area recently colonised by wolves. The findings have implications for wildlife conservation as the impact of changing predator numbers on prey species is important for managing populations of both predators and prey.

Lead author, Miranda Davis, from the School of Biological and Biomedical Sciences at Durham University, said: "Our research demonstrates a consistent selection for wild boar among wolves in the



study area, which could affect other prey species such as roe deer."

"Intriguingly, in other parts of Europe where red deer are also available, wolves appear to prefer this prey to wild boar, suggesting that they discriminate between different types of <u>venison</u>."

In Europe, the wolf (*Canis lupis*) is recovering from centuries of persecution and the expansion of <u>wolf populations</u> has the potential to change the ecology of communities of ungulates (hooved animals) by exposing them to natural predation by wolves, according to the researchers.

The preference for boar is in contrast to other areas of Europe where wolves often avoid boar as prey. One factor may be the relatively smaller size of Mediterranean boar, making them less dangerous to wolves in Mediterranean regions, compared to the larger-sized boar that roam other parts of Europe.

Co-author, Dr Stephen Willis, from the School of Biological and Biomedical Sciences at Durham University, said: "Wolves were hunted to extinction in the UK, probably by the end of the 17th century. Our findings from Italy suggest that if they were reintroduced into an area with a healthy ungulate population their impact on livestock could be minimal."

Tuscany's woodlands support populations of both roe deer and wild boar, and are also grazed by sheep, goats and cattle; however, wild boar and roe deer made up over 95 per cent of wolf diet in the study area, with very little evidence of livestock <u>predation</u>.

The scientists identified prey items from fragments of bones and hair in the wolf dung collected in the region. The prey categories included wild boar, roe deer, <u>red deer</u>, hare, small rodents, goats, sheep and cattle.



For more than five years of the study, the percentage of wolf diet made up of <u>wild boar</u> was more than twice that of <u>roe deer</u>. Other <u>prey</u> represented only a very small proportion of the diet.

The researchers believe that further dietary studies are essential for understanding the true impact of wolves on European wildlife over time.

Co-author, Dr Phil Stephens, from the School of Biological and Biomedical Sciences at Durham University added: "Wolves and brown bears are gradually returning to their former strongholds in Europe. Understanding the needs of these species, as well as their potential impacts, is going to be fundamental to managing that welcome return."

**More information:** www.plosone.org/article/info %3Adoi%2F10.1371%2Fjournal.pone.0047894

## Provided by Durham University

Citation: Italian wolves prefer pork to venison (2012, December 20) retrieved 25 April 2024 from <a href="https://phys.org/news/2012-12-italian-wolves-pork-venison.html">https://phys.org/news/2012-12-italian-wolves-pork-venison.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.