

CAN THE DONKEY BE A POSSIBLE PREY FOR

GOLDEN JACKAL?Description of the predation strategy on multiple attacks

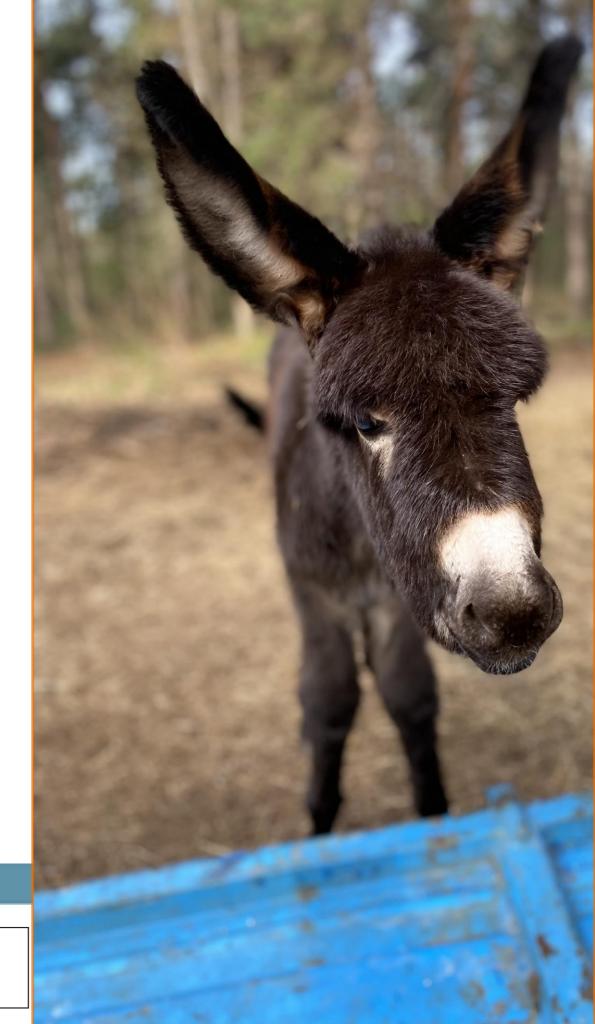
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Diet of Jackal

The available literature mostly refer to data obtained from the analyses of stomach contents and/or reports about the impacts on livestock.









The golden jackal (*Canis aureus*) is an opportunistic carnivore, mainly showing a scavenging behaviour but also active predations.





Diagnosis and compensation of damages

In Italy as in FVG the damages causing to wild carnivores (jackal, wolf, bear) are compensated by regional public authority

The assessment of predatory events are evaluated by regionalforest in association with veterinarians (University of Udine or public veterinary authority)

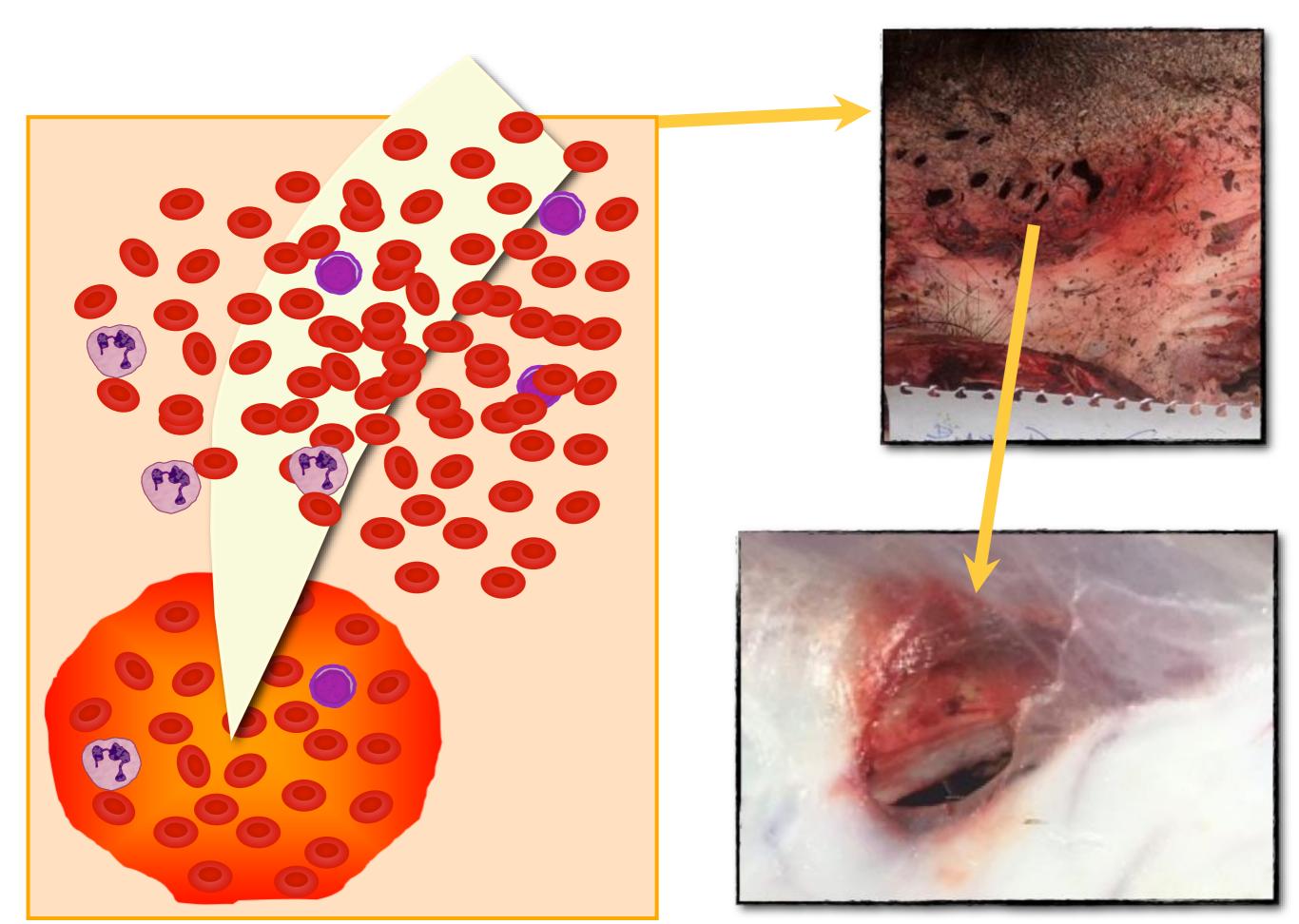




The bite and claw produce lacerated bruised wounds as a result of the compression and traction action exerted by the predator's mouth and head by means of the teeth. (Canids, Bear, Lynx)

The cut has an elongated shape, with sharp edges, acute extremes and with walls with clear and regular edges. (Bear, Lynx)

Diagnosis and compensation of damages



Predation on livestock in FVG



Prey: Sheep (Istrian sheep or medium-small breeds)

Age: juvenile, adult

BDS: various

Localization: different areas of FVG

Period: (April-Agust)

Lesions



Fig 1 Multiple cutaneous laceration in neck caused by bites



Fig. 2 Subcutaneous and muscles hemorrhages in mandibular and neck districts



Fig. 3 Cutaneous lacerations in abdominal area caused by bites

Consumption



Fig. 1 Consumption of toracic muscles



Fig. 2 Consumption of thoracic organs, abdominal wall and some part of limb muscles



Fig. 3 Dislocation of GE tract (forestomachs and intestine)

Cases Report of this Study





Prey: donkeys

Age: juvenile, adult

BDS: various

Period: March-July from 2016 to 2021

 Localization: in the restricted area of the Italian Karstland

Area of events: 39 ha (3,31ha)



| N° | Date | Gender | Age |
|----|------------|--------------|-------|
| 1 | 2016.07.29 | F | Adult |
| 2 | 2017.04.07 | F | Adult |
| 3 | 2019.03.05 | F (1 year) | Juv |
| 4 | 2020.03.03 | F | Adult |
| 5 | 2020.03.07 | F (pregnant) | Adult |
| 6 | 2021.03.12 | F | Adult |

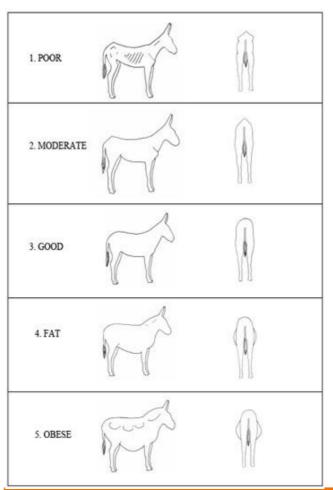
Animals





| N° | Date | BCS | |
|----|------------|------------|--|
| 1 | 2016.07.29 | 1 Poor | |
| 2 | 2017.04.07 | 2 Moderate | |
| 3 | 2019.03.05 | 3 Good | |
| 4 | 2020.03.03 | 3 Good | |
| 5 | 2020.03.07 | 3 Good | |
| 6 | 2021.03.12 | 3 Good | |

Physical conditions



Weight estimation 60-200 kg



| N° | Consumption | Lesions | Outocome |
|----|--|--|------------|
| 1 | Abundant of cutis/subcutis and mucosa of external genitalia, anal sphincters, mm pelvic limb | Severe laceration of: cutis, muscles, anus, external genitalia | Died |
| 2 | Cutis/subcutis and mucosa of external genitalia, anal sphincters | Laceration of cutis, muscles, anus, external genitalia | Died |
| 3 | Absence | Lacerations of cutis of perineal region | Alived |
| 4 | Cutis/subcutis and mucosa of external genitalia, anal sphincters | Lacerations of cutis, muscles, anus, external genitalia | Died |
| 5 | Cutis/subcutis and mucosa of external genitalia, anal sphincters | Lacerations of cutis, muscles, anus, external genitalia | Euthanized |
| 6 | Absence | Lacerations of cutis and subcutis of perineal region and tail | Alived |

Medical aspects



Anatomopathological aspect



Fig. 1 Skin scar in the tail



Fig. 3 Abundant consumption of perineal area and mm. of pelvic limb: hamstring, semitendinosus, semimebranosus

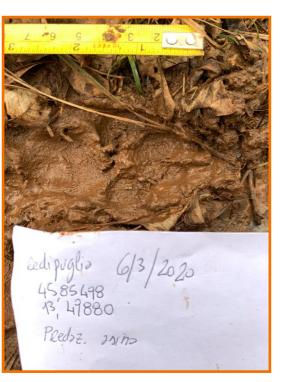


Fig. 2 Cicatrization process with granulation tissue and hemorrhagic scar in perianal area



Fig. 4 Lesions and consumption of perineal area Anal sprinter and external female genitalia

Attribution of predator









Signs of presence:

scat, footprint, jackal howl Anatomapathological investigation:
Trained and experienced staff

Camera trapping:
video
photo

Attribution of predator



Attribution of predator



Conclusions

- These finding represent the first documented cases of attacks towards donkeys.
- Despite rare, these events prove the capacity of the jackal to attack big prey (more than 10 times larger).
- The choice of the perineal region can be interpreted as an attempt to induce severe injuries due to the high vascularized and thinness skin that can be induce the death even if not immediately or the induction of abortion in donkey birth period or can be correlated by other reasons..
- Probably this predatory events can be associated with one specific pack or individual and can be correlated to the high density of jackals in the study area, as well as to the improper management of donkeys.
- Our findings contribute to enrich the scanty information available about the impact that golden jackals may have on livestock



Thank you for attention

Thanks to:



Stazione Forestale di Attimis



