

International Deer Research Archive

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[Troubling disease syndrome in endangered live Patagonian huemul deer \(*Hippocamelus bisulcus*\) from the Protected Park Shoonem: unusually high prevalence of ...](#) WT Flueck, JAM Smith-Flueck - BMC Research Notes, 2017

... Areas currently used by huemul have reduced selenium bioavailability, very deficient soil levels, and overt selenium deficiency in local livestock and plants. These areas are known to result in primary iodine deficiency which is aggravated by selenium deficiency. The nexus to nutritional ecology of huemul likely is inaccessibility to most fertile lowlands and traditional winter ranges, elimination of migratory traditions, and concomitant elimination of source populations...

[Rare migrants suffice to maintain high genetic diversity in an introduced island population of roe deer \(*Capreolus capreolus*\): Evidence from molecular data and ...](#) P

Steinbach, M Heddergott, H Weigand, AM Weigand... - Mammalian Biology, 2018
... The island population on Fehmarn became established, however, despite being founded by eight individuals with (supposedly) no subsequent restocking ... Despite this strong founder effect, previous work has shown the contemporary population not to be genetically impoverished. The reasons for this were not entirely clear...

[What makes a deer tick?](#) November 25, 2017 Minnesota, Minneapolis Star Tribune
... movement of bucks during breeding season ... did increase and expand as the rut continued... they appeared to expand their range only after most available does in their area had been bred. Then they started ranging wider.” ... hunting pressure didn’t appear to cause bucks to leave their usual ranges. Instead, the bucks reacted to a hunter’s presence in a stand by confining their movements to nighttime [study by Clint McCoy in 2014] ...

[First evidence of “ancient deer”\(cervid\) in the late Miocene Bira Formation, Northern Israel](#) AG Rozenbaum, DS Gelband, M Stein, HK Mienis... - PloS one, 2017

... The mammalian bone was discovered among the macrofauna fossils, and is described as an almost complete left humerus of an adult animal identified as an artiodactyls element probably of a cervid... It appears that the freshwater lakes provided favorite habitat for the development of the cervids and possibly other mammals....

[The history of Crimean red deer population and Cervus phylogeography in Eurasia](#)

K Doan, PŁ Mackiewicz, E Sandoval-Castallanos... - Zoological Journal of the ..., 2017
... Our analyses showed that the Crimean Peninsula was not a glacial refugium for red deer, but rather that red deer colonized Crimea in three independent waves from both Western and Eastern red deer populations. The immigrations were related to local extinctions and replacements of native populations...

[Genetic diversity of the pampas deer \(Ozotoceros bezoarticus\) population in the Brazilian Pantanal assessed by combining fresh fecal DNA analysis and a set of ...](#)

AMB Mantellatto, R Caparroz, MD Christofolletti... - Genetics and Molecular ..., 2017
... The pampas deer (Ozotoceros bezoarticus) is close to being classified as 'globally threatened', with the largest population occurring in the Brazilian Pantanal... Our findings suggest that management strategies for this species may be much more effective if applied now when the population still shows high genetic variability...

[The complete mitochondrial genome of Eld's deer \(Rucervus eldii eldii\) and its phylogenetic implications](#)

W Tabasum, DR Parmar, A Jayaraman, S Mitra... - Gene Reports, 2017

... The complete mitogenome and protein-coding genes of R. e. eldii were found to be highly A + T biased. Rate of protein evolution was highest in nad6 and lowest in cox1. The phylogenetic analyses based on concatenated amino acid and nucleotide sequences of 13 protein-coding genes provided a well-supported broader outline of cervidae, which agree with the previously described traditional morphological classification....

[A gene-tree test of the traditional taxonomy of American deer: the importance of voucher specimens, geographic data, and dense sampling.](#)

ZooKeys 697: 87–131 EE
Gutiérrez, KM Helgen, MM McDonough, F Bauer... - 2017

... no phylogenetic study using nuclear sequence data from mule deer, white-tailed deer, and black-tailed deer have been conducted to date. If further analyses based on sequence data obtained from independently inherited loci confirm the topology obtained from mtDNA, then reconciling taxonomy with phylogenetics would require elevating columbianus and sitkensis to species rank ...

[Using genetic tools to estimate the prevalence of non-native red deer \(Cervus elaphus\) in a Western European population](#)

AC Frantz, FE Zachos, S Bertouille, MC Eloy, M Colyn... - Ecology and Evolution, 2017

... certain functions of red deer in ecosystems, such as regeneration of heather by grazing, may depend on variation in body condition within the population. Our findings

call for the need to consider the consequences of management practices, including culling or supplemental feeding, on the outcomes of habitat restoration ...

[A matrix system using quality classes can be applied for managing sustainable wild ungulates populations: Convergence below optimum capacity](#) Á Martínez, ÁJ Martín - Ecological Engineering, 2017

... The output provides essential information for the management, as the population density evolution by quality classes twice a year: after the reproductive season and the extraction season, population growth rate, stable population distribution and extraction rate to guarantee a healthy and sustainable population. The model describes a method to reach a stable Optimum Capacity, reducing conflicts with human societies and environment deterioration ...

[Body condition, diet and ecosystem function of red deer \(*Cervus elaphus*\) in a fenced nature reserve](#) C Fløjgaard, M De Barba, P Taberlet, R Ejrnæs - Global Ecology and Conservation, 2017

... certain functions of red deer in ecosystems, such as regeneration of heather by grazing, may depend on variation in body condition within the population. Our findings call for the need to consider the consequences of management practices, including culling or supplemental feeding, on the outcomes of habitat restoration ...

[Autumn bed site selection by sika deer \(*Cervus nippon*\) in the Taohongling National Nature Reserve, China](#) J Li, YK Li, WH Liu - Russian Journal of Ecology, 2017

... sika deer displayed a preference for bed sites with a moderate height of grass fallow and brush fallow, lower shrub density, higher herb density, lower canopy coverage, and higher undergrowth coverage. The bed sites were also characterized as being located on sunny slopes, gentle slopes, and upper slopes, with high elevation. In addition, most bed sites were located far away from human disturbance (more than 1000 m)...

[Deer browsing promotes Norway spruce at the expense of silver fir in the forest regeneration phase](#) M Bernard, V Boulanger, JL Dupouey, L Laurent... - Forest Ecology and ..., 2017

...We demonstrated that the presence of deer decreased the density, height and diameter of silver fir saplings, while it increased the height of Norway spruce saplings. We also noticed that the effect of fencing was very different depending on fencing duration, and that even 10 years of fencing led to changes that were still visible 17 years later...

[The decline of ungulate populations in Iranian protected areas calls for urgent action against poaching](#) A Ghoddousi, M Soofi, AK Hamidi, S Ashayeri, L Egli... - Oryx, 2017

... We estimated the abundance of four ungulate species in Golestan National Park, Iran, the country's oldest protected area, where poaching of ungulates is widespread... Population estimates for 2011–2014 indicated a 66–89% decline in three ungulate species (bezoar goat *Capra aegagrus*, red deer *Cervus elaphus* and urial *Ovis vignei*) compared to 1970–1978...

[Age-related effects of body mass on fertility and litter size in roe deer](#) K Flajšman, K Jerina, B Pokorny - PLoS One, 2017

... while yearlings have to reach a critical threshold body mass to attain reproductive maturity, adult females are fertile (produce ova) even at low body mass. However, at higher body mass also younger individuals shift their efforts into the reproduction, and after reaching an age-specific threshold the body mass does not have any further effects on the reproductive output of roe deer females. Increased reproductive capacity at more advanced age, combined with declining body mass suggests that old does allocate more of their resources in reproduction than in body condition...

[Impact of selective hunting on the trophy size of roe deer: Baltic example](#) April, 2017
L BALČIAUSKAS, R VARANAUSKAS, E BUKELSKIS

... We conclude that bucks in Latvia and Estonia are hunted out before they reach trophy maturity (5–7 years). The antlers of fast growing bucks in the age of 3–4 years are almost as big, so they are untimely eliminated from the population. We recommend extending the preservation period of healthy roe deer buck to 6 years of age, giving hunters the possibility to estimate their age not solely on antler size, but also on other body characters...

[Survival rates and causes of mortality of roe deer *Capreolus capreolus* in a rural landscape, eastern Poland](#) L Sönnichsen, T Borowik, T Podgórski, K Plis, A Berger... - Mammal Research, 2017

... Annual survival rate of all deer was 0.69 and did not differ between seasons. Annual survival rates of females and males in each age class (young and adult) were similar. Poaching was a major source of mortality (6 out of 13 roe deer deaths), and poachers did not prefer any sex or age. Adult survival (0.77) was higher than survival of young individuals (0.53) ...

[Metal deposition of copper and lead bullets in moose harvested in fennoscandia](#)
S Stokke, S Brainerd, JM Arnemo - Wildlife Society Bulletin, 2017

... a significant amount of toxic lead from lead-based bullets is deposited in the tissue of harvested moose, which may affect the health of humans and scavengers that ingest it. By switching to copper bullets, Fennoscandian hunters can eliminate a significant source of lead exposure in humans and scavengers...

[Competition between apex predators? Brown bears decrease wolf kill rate on two continents](#)

A Tallian, A Ordiz, MC Metz, C Milleret, C Wikenros... - Proc. R. Soc. B, 2017
... In Scandinavia, wolf packs sympatric with brown bears killed less often than allopatric packs during both spring (after bear den emergence) and summer. Similarly, the presence of bears at wolf-killed ungulates was associated with wolves killing less often during summer in Yellowstone. The consistency in results between the two systems suggests that brown bear presence actually reduces wolf kill rate. Our results suggest that the influence of predation on lower trophic levels may depend on the composition of predator communities...

[Migration in geographic and ecological space by a large herbivore](#) W Peters, M Hebblewhite, A Mysterud, D Spitz... - Ecological Monographs, 2017

... Determinants for predicting migration probability included the temporal variation (seasonality) and also the spatial variability of forage patches. Lastly, we also found suggestive evidence for a positive relationship between population density and migration probability...

[Assessing Fifty Years of General Health Surveillance of Roe Deer in Switzerland: A Retrospective Analysis of Necropsy Reports](#) M Pewsner, FC Origgi, J Frey, MP Ryser-Degiorgis - PloS one, 2017

... We compiled 1571 necropsy reports of free ranging roe deer examined at the Centre for Fish and Wildlife Health in Switzerland from 1958 to 2014. Descriptive data analysis was performed considering animal metadata, submitter, pathologist in charge, laboratory methods, morphological diagnoses and etiologies. Recurrent causes of mortality and disease pictures included pneumonia, diarrhea, meningoencephalitis, actinomyces, blunt trauma, predation, neoplasms and anomalies. By contrast, other diagnoses such as fatal parasitic gastritis, suspected alimentary intoxication and reproductive disorders appeared only in earlier time periods ...

[Deer species capable of building and shedding their antlers already existed in the Miocene](#) December 22, 2016 Phys

... new study shows that deer species capable of building and shedding their antlers already existed about 20 to 15 million years ago, in the Miocene. The finding sheds new light on the evolution of deer... findings appear in the Journal of Morphology...

[Female red deer with big brains have it all](#) December 13, 2016 United Kingdom, Science Magazine

... the scientists report today in Royal Society Open Science... [female red deer with larger brains lived longer and had more surviving offspring](#)—and they passed their big brain trait to their kids ...

[The paradox of long-term ungulate impact: increase of plant species richness in a temperate forest](#) O Vild, R Hédli, M Kopecký, P Szabó, S Suchánková... - Applied Vegetation Science, 2016

... Contrary to our expectations, our long-term data showed that artificially high ungulate densities substantially increased plant species richness. Apparently, the establishment of ruderal herbs was supported by frequent disturbances and ungulate-mediated dispersal. At the same time, species richness of non-ruderal plants did not change, probably because ungulates hindered the regeneration of woody species and maintained an open forest canopy. In conclusion, high ungulate density led to the spread of ruderal species, which in turn strongly contributed to the observed shift towards nutrient-rich conditions and taxonomically more homogenous communities...

[Identification of axon growth promoters in the secretome of the deer antler velvet](#)

W Pita-Thomas, G Barroso-García, V Moral, AR Hackett... - Neuroscience, 2016

... Our proteomic analyses identified several axon growth promoters in the velvet conditioned medium, including soluble proteins such as NGF and apolipoprotein A-1, as well as matrix extracellular proteins, such as periostin and SPARC. Additional in vitro analyses allowed us to determine that a synergic relationship between periostin and NGF may contribute to the neurite growth promoting effects of velvet secretome. A combinatorial approach using these factors may promote regeneration at high speeds in patients with peripheral neuropathies...

[10 Years for Recovery Chinese water deer in Shanghai area](#) M Chen, E Zhang - Research and methods in ecohealth and conservation, 2016

... Huaxia park (in Pudong district, Shanghai) was chosen as a plot area to establish release stock, after two year, the deer has not only adapted to the climatic conditions, but also succeeded in reproducing. The stock numbers in Huaxia Park grew from 21 to 51 in the first couple of years; 80.95% of the introduced individuals survived and the survival rate of their offspring was 79.54%....

[Initiating conservation of a newly discovered population of the Endangered hog deer](#)

Axis porcinus in Myanmar N Lwin, M Linkie, A Harihar, SS Aung, AK Lin... - Oryx, 2016

... We report on a population of hog deer that was discovered in the Indawgyi landscape in central Myanmar in 2012. We conducted the first rigorous assessment of a hog deer population in Myanmar using an occupancy sampling protocol, tested the protocol's robustness using a power analysis, and present the results to guide management

intervention. The results from our study site revealed widespread occurrence of the species, with high precision...

[Land abandonment and changes in snow cover period accelerate range expansions of sika deer](#) Japan, H Ohashi, Y Kominami, M Higa, D Koide, K Nakao... - Ecology and Evolution, 2016

... model to predict the changes in the range of sika deer over the next 100 years under four scenario groups with the combination of land-use change and climate change... climate change will contribute more to range expansion, particularly from the 2070s onward...

[Comparison of Drive Counts and Mark-Resight As Methods of Population Size Estimation of Highly Dense Sika Deer \(*Cervus nippon*\) Populations](#) Japan, K Takeshita, T Ikeda, H Takahashi, T Yoshida, H Igota... - PLOS ONE, 2016

... We compared the drive counts and mark-resight (MR) methods in the evaluation of a highly dense sika deer population (MR estimates ranged between 11 and 53 individuals/km²) on Nakanoshima Island, Hokkaido, Japan ... Although the drive counts tracked temporal changes in deer abundance on the island, they overestimated the counts for all years in comparison to the MR method. Increased overestimation in drive count estimates after the winter mass mortality event may be due to a double count derived from increased deer movement and recovery of body condition secondary to the mitigation of density-dependent food limitations...

[Living on the boundary of a post-disturbance forest area: The negative influence of security cover on red deer home range size](#) J Borkowski, J Ukalska, J Jurkiewicz, E Češko - Forest Ecology and Management, 2016

... Our findings suggest that in populations under strong hunting pressure, security cover is a key resource, determining deer space use, especially in post-disturbance forests. We concluded that large areas of cover-offering habitats may lead to local increase in deer population and higher browsing pressure also in surrounding forests...

[Why Don't Deer Crash Into Each Other When Startled?](#) September 21, 2016 Scientific American

... It is reasonable to assume that the deer would run directly away from an approaching threat or toward the nearest cover. Instead the researchers discovered that the animals preferred heading toward magnetic north or south...

[First case of chronic wasting disease in Europe in a Norwegian free-ranging reindeer](#) SL Benestad, G Mitchell, M Simmons, B Ytrehus... - Veterinary Research, 2016

... Chronic wasting disease (CWD) is a fatal contagious prion disease in cervids that is enzootic in some areas in North America. The disease has been found in deer, elk and moose

in the USA and Canada, and in South Korea following the importation of infected animals. ... Until now a low number of cervids, and among them a few reindeer, have been tested for CWD in Norway. Therefore the prevalence of CWD is unknown...

[Trees recognise roe deer by saliva](#) September 12, 2016 Jura Forum

... If a deer feeds on a tree and leaves its saliva behind, the tree will increase its production of salicylic acid. This hormone, in turn, signals to the plant to increase the production of specific tannins. It is known for some of these substances that they influence the feeding behaviour of roe deer, with the result that the deer lose their appetite for the shoots and buds...

[Temporal and spatial dynamics of insular Rusa deer and wild pig populations in Komodo National Park](#) A Ariefiandy, DM Forsyth, D Purwandana, J Imansyah... - Journal of Mammalogy, 2016

... Our findings confirm the importance of density dependence in the dynamics of tropical large herbivore populations. However, the strength of density dependence varied between species and spatially. Declines of Rusa deer and wild pigs on the larger 2 islands, which are strongholds of the Komodo dragon, are cause for concern. Continued monitoring of ungulate populations is critical for the conservation of Komodo dragon populations in Komodo National Park....

[Red deer \(Cervus elaphus\) fertility and survival of young in a low-density population subject to predation and hunting](#) T Borowik, P Wawrzyniak, B Jędrzejewska - Journal of Mammalogy, 2016

... The main objectives of our study, conducted in Augustów, Knyszyn, and Białowieża Forests in northeastern Poland from 2006 to 2011, were to quantify reproductive characteristics of female red deer (Cervus elaphus) and determine factors affecting their fertility... Survival of young increased with age of mother in young and prime-aged females and decreased in older females. Summer weather conditions at the time of the study were stable; therefore, their effect on female fertility was not evident. The negative effects of density dependence, which operate mainly through female body condition in this large ungulate, were weak, resulting in adequate food resources, and high fertility rates and population productivity...

[Deer evolution: Ancient DNA reveals novel relationships](#) August 9, 2016 Science Daily

... a second form of muntjac (*Muntiacus atherodes*) found in Borneo (together with *M. muntjac*) is a bona fide species, while the Philippine spotted deer (*Rusa alfredi*) appears to represent a subspecies of the Philippine brown deer (*R. marianna*)..

[Endozoochory by the Persian fallow deer reintroduced in Israel: species richness and germination success](#) R Zidon, H Leschner, U Motro, D Saltz - Israel Journal of Ecology & Evolution, 2016

... From fecal samples, we found that more than 30 species of plants germinated from the deer pellets. Four of the more common species are considered as ruderal. Of the trees, carob (*Ceratonia siliqua*) seeds were the only intact seeds found in the fecal samples. We found that ingestion by the deer has a positive effect on expediting the germination of carob seeds ...

[A new insight for monitoring ungulates: density surface modelling of roe deer in a Mediterranean habitat](#) AM Valente, TA Marques, C Fonseca, RT Torres - European Journal of Wildlife ..., 2016

... In this study, we combined density surface modelling (DSM) with line transect survey to predict roe deer density in northeastern Portugal. This was based on modelling pellet group counts as a function of environmental factors while taking into account the probability of detecting pellets and conversion factors to relate pellet density to animal density. We estimated a global density of 3.01 animals/100 ha (95 % CI 0.37–3.51) with a 32.82 % CV. Roe deer densities increased with increasing distance to roads as well as with higher percentage of cover areas and decreased with increasing distance to human populations. This recently developed spatial method can be advantageous to predict density over space through the identification of key factors influencing species abundance...

[Ear and Tail Lesions on Captive White-Tailed Deer](#) Fawns TL Ferguson, S Demarais, J Cooley, S Fleming... - Journal of Zoo and Wildlife ..., 2016

... During the 2008–2011 time period, undiagnosed lesions were observed in 21 of 150 white-tailed deer fawns (*Odocoileus virginianus*) that were part of a captive deer herd at Mississippi State University. Clinical findings in healthy and diseased fawns from 0 to 90 days of age included bite and scratch marks followed by moderate to severe ear and tail necrosis. Gross necropsy findings of necrotizing ulcerative dermatitis correlated with histopathologic findings that included focally severe multifocal vasculitis, vascular necrosis, and thrombosis. This article is a clinical description of these previously unreported lesions associated with tissue necrosis in young captive white-tailed deer...

[Ear and Tail Lesions on Captive White-Tailed Deer](#) Fawns TL Ferguson, S Demarais, J Cooley, S Fleming... - Journal of Zoo and Wildlife ..., 2016

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[Developing and testing a habitat suitability index model for Korean water deer \(*Hydropotes inermis argyropus*\) and its potential for landscape management decisions in Korea](#) J Jung, Y Shimizu, K Omasa, S Kim, S Lee - Animal Cells and Systems, 2016
... The model is based on logistic regression analysis, which addresses the impact of multiple habitat variables, such as habitat components, topographic characteristics, and human disturbances... ur HSI model enabled us to quantify habitat preferences, which could be the basis for decision-making on habitat protection, mitigation, and enhancement of the Korean water deer...

[A native top predator relies on exotic prey inside a protected area: The puma and the introduced ungulates in Central Argentina](#) JIZ Martínez, MÁ Santillán, JH Sarasola, A Travaini - Journal of Arid Environments, 2016
... Results indicate that puma diet was composed mostly by introduced species, which represented 80.8% of the total biomass consumed (*Cervus elaphus* 40.6%, *Sus scrofa* 39.4%, and *Ovis aries* 0.8%). Pumas mainly preyed on introduced ungulates in the protected area, where management guidelines do not account for puma-native prey interactions. We suggest implementation of management actions to reduce densities of these introduced ungulates to restore natural ecological interactions between the puma and native prey...

[Estimating age and age class of harvested hog deer from eye lens mass using frequentist and Bayesian methods](#) DM Forsyth, M Garel, SR McLeod - Wildlife Biology, 2016

... Estimation of the age or age class of harvested animals is often necessary to interpret the condition and dynamics of wildlife populations. The mammalian eye lens continues to grow until death and hence the dry mass of the eye lens has commonly been used to estimate the age of mammals... We provide tables of correspondence between hog deer eye lens dry mass and predicted age and age class. Our statistical methods can be used to estimate age and age class for other mammalian species, including from other ageing techniques such as tooth eruption-wear criteria ...

[Individual variation in mule deer \(*Odocoileus hemionus*\) habitat and home range in the Chihuahuan Desert, Mexico](#)

LA Pérez-Solano, S Gallina-Tessaro, G Sánchez-Rojas - Journal of Mammalogy, 2016
... Historically, mule deer (*Odocoileus hemionus*) had a distribution area as large as the Chihuahuan Desert in Mexico, but in recent years, its populations have decreased and distribution areas have become isolated... Based on the deer location data, home range and habitat use were estimated for each deer. The mean ($\pm$ SD) home range size for females was 14.70 km² ($\pm$ 5.89), the home range of the male was 18.05 km²...

[Body measurements from selective hunting: biometric features of red deer \(*Cervus elaphus*\) from Northern Apennine, Italy](#) V Becciolini, R Bozzi, M Vilianni, S Biffani, MP Ponzetta - Italian Journal of Animal ..., 2016

... hind foot length was the measure which first ceased to grow and with the highest growth constant; although the relationship between cohort hind foot length and environmental, climatic and demographic variables has to be tested for red deer from Apennine, these bones appeared a suitable biological indicator for long-term monitoring of the species...

[Congenital Mature Intracranial Teratoma in a Pampas Deer \(*Ozotoceros bezoarticus*\) in Brazil](#) SA Headley, TC Costa, RA Marcasso, CLS Hilst... - Journal of Wildlife Diseases, 2016

... We describe a congenital mature intracranial teratoma in a Pampas deer (*Ozotoceros bezoarticus*) in southern Brazil. We found an irregular, spongy, space-occupying mass in the brain. The tumor consisted of well-differentiated tissues that derived from all three germ layers...

[First description of spatial and temporal patterns of river crossings by European roe deer *Capreolus capreolus* \(Mammalia: Cervidae\): characteristics and possible ...](#) B Tóth, G Schally, N Bleier, R Lehoczki, S Csányi - Italian Journal of Zoology, 2016

... During the study period, animals of both sexes crossed the river without difference. There were crossings in all seasons, in daytime and nighttime also. We could not find any difference between the seasons, but there were more crossings in the daytime when we excluded the data of an outlier animal. Water level or human disturbance (live brown hare capture) had no impact on crossings. We conclude that the Tisza River does not represent a real barrier to the movements of roe deer,

[Compass-controlled escape behavior in roe deer](#) P Obleser, V Hart, EP Malkemper, S Begall, M Holá... - Behavioral Ecology and ..., 2016

... This is the first study of escape behavior in animals which considers also the role of absolute compass direction. Our findings confirm existence of magnetic alignment and thus magnetosensitivity in the roe deer and provide first evidence for its role as the so-called direction indicator in control of escape behavior in roe deer in particular and in mammals in general. Our results make the speculations more plausible that the magnetic alignment helps to organize and read the mental (cognitive) map of space...

[Japan's monkeys wash their potatoes and ride deer like horses](#) June 8, 2016

ResearchGate

... My favorite behavior is that of a macaque riding on the backs of Sika deer. There is a close cooperation between macaques and deer on Yakushima island. The deer eat seeds dropped by macaques on the ground, as well as their feces. Macaques may groom the deer for parasites such as lice, which are rich in proteins. At times, macaques will climb on the back of a deer for transportation ...

[Deer make collision-free escapes thanks to inbuilt 'compasses'](#) June 7, 2016

Science Daily

... Their getaway is almost always along a north-south axis, thanks to their ability to sense the magnetic field, says Petr Obleser of the Czech University of Life Sciences ... roe deer tend to align their bodies along the north-south axis when grazing. When startled, the animals generally fled away from observers. They did not merely make their getaway in the direction directly opposite to the approaching threat ...

[Musk Deer Trade and Worldwide Depletion](#) M Ali - Environmental Policy and Law, 2016

... A strange inhabitant of the forested hills of eastern Asia is the musk deer. Not much bigger than a large hare and covered by a thick coarse coat, it differs from most deer in

several other startling ways. The male does not have antlers, but does grow a pair of curved tusks ... Musk deer are evolutionarily primitive, and have now been excluded from the family Cervidae. Unlike deer, they possess a gall bladder ...

[Long term assessment of roe deer reintroductions in North East Spain: A case of success](#) RT Torres, J Carvalho, C Fonseca, E Serrano... - ... Biology-Zeitschrift für ..., 2016

... we evaluated the contribution of roe deer *Capreolus capreolus* reintroductions (1971–2008) to the current distribution of this species in Catalonia (Spain) ... Our results show that roe deer currently occupies 85% of Catalonia territory, which represents an almost six-fold increase since the beginning of the 90s. Proximity to the nearest reintroduction nuclei was identified as one of the main drivers positively associated to the current distribution of roe deer ...

[Deer herbivory affects the functional diversity of forest floor plants via changes in competition-mediated assembly rules](#) K Nishizawa, S Tatsumi, R Kitagawa, AS Mori - Ecological Research, 2016

... Our results emphasize that although deer overabundance is of concern, their complete exclusion has a negative consequence from an ecological perspective. Because deer herbivory is an inherent process that affects the biodiversity of plants on the forest floor, the establishment of fences requires careful consideration to ensure the conservation of ecological processes and their associated biodiversity...

[Historical Range and Present Status of Hangul Deer CERVUS ELAPHUS HANGLU In Kashmir, India](#) [PDF will download] BA Bhat, MF Fazili - Global Journal For Research Analysis, 2016

... At present, the only viable population of red deer of Kashmir is confined to Dachigam National Park (DNP), with a few isolated hangul herds in its adjoining protected areas (Ahmad et al 2009). The park is situated 21km northeast of Srinagar ...

[Modeling the impact of selective harvesting on red deer antlers](#) RA Pozo, S Schindler, S Cubaynes, JJ Cusack... - The Journal of Wildlife ..., 2016

... When male mortality rates due to hunting were <20%, the effect on antler size distribution and the reproductive value function were relatively small. However, as mortality due to hunting increased to 50% in large individuals, the direct effects of hunting on mean antler size and reproductive value became evident...

[Microsatellites reveal plasticity in reproductive success of white-tailed deer ...](#)

TJ Neuman, CH Newbolt, SS Ditchkoff, TD Steury - Journal of Mammalogy, 2016

... We used 14 microsatellite DNA loci to assign parentage and reconstruct the pedigree of a captive population of white-tailed deer ... Age differences between mated pairs did not differ from random pairings and we found no apparent relationship of skeletal size between pairs. Our results highlight the plasticity of mating success for white-tailed deer and we speculate their mating system has evolved to maximize fertility...

[Complete mitochondrial genome sequence of a Hungarian red deer \(*Cervus elaphus hippelaphus*\) from high-throughput sequencing data and its phylogenetic ...](#)

K Frank, E Barta, NÁ Bana, J Nagy, P Horn, L Orosz... - Acta Biologica Hungarica, 2016

... determined the complete mitochondrial genome of a Central European red deer, *Cervus elaphus hippelaphus*, from Hungary by a next generation sequencing technology. The mitochondrial genome is 16 354 bp in length and contains 13 protein-coding genes, two rRNA genes, 22 tRNA genes and a control region, all of which are arranged similar as in other vertebrates...

[Anatomy of the female reproductive system of *Rusa deer* \(*Rusa timorensis*\)](#)

MB Mahre, H Wahid, Y Rosnina, FFA Jesse, AZ Jaji... - Sokoto Journal of Veterinary ..., 2016

... The study aims to present baseline data on the reproductive anatomy of a poorly known tropical deer species, *Rusa deer* ... Unlike the red brocket deer and pampas deer, the cervix of *R. timorensis* was characterized by six cervical rings projecting into the cervical canal. This feature should be taken into account when designing effective instrumentation and techniques for transcervical passage of semen during artificial insemination in this species...

[Growth and Age Structure in an Introduced and Hunted Cervid Population: White-Tailed Deer in Finland](#)

J Kekkonen, M Wikström, I Ala-Ajos, V Lappalainen... - Annales Zoologici Fennici, 2016

... The sample indicated a deficit of older males in the population. Females seem to gain their size at the age of two while males continue to increase their body size and that of skeletal traits until the age of four. The size traits measured were similar to those in the North American studies. Based on population growth patterns and introduction history, the white-tailed deer population is performing well in Finland but the potentially skewed sex-specific age distribution warrants further attention....

[Efficacy of non-lead rifle ammunition for hunting in Denmark](#)

N Kanstrup, TJS Balsby, VG Thomas - European Journal of Wildlife Research, 2016
... For red deer, we were not able to show any statistical significant difference between performance of non-lead and lead bullet. For roe deer, we found a small, statistically significant, relation between flight distances and shooting distance for roe deer struck with non-lead bullets but not with lead bullets. However, this difference was not of such magnitude as to have any practical significance under hunting conditions...

[Population dynamics and structure of roe deer \(*Capreolus capreolus*\) inhabiting small-size forests in north-western Poland.](#) ... Folia Zoologica, 2016

... both the population numbers and harvesting of roe deer in Poland have been on the increase from 597,000 to 876,000 animals and from 158,000 to 172,000 harvested individuals, respectively. ... The average population number of roe deer assessed for these four years was 3568 individuals and was more than two times higher than the average population size ($n = 1670$) given by hunters....

[Inbreeding impacts on mothering ability, red deer study shows](#) March 14, 2016

Scotland, Science Codex

... the 40-year study to determine the extent of inbreeding on the ability of each animal to reproduce and successfully raise offspring.... Inbred mothers give birth to calves whose chances of survival are almost as bad as if the calves themselves were inbred."
... Proceedings of the National Academy of Sciences ...

[Tiny island deer in Panama hunted to extinction thousands of years ago](#) March 3, 2016

Phys

... Adult deer living on Pedro González island 6,000 years ago weighed less than 22 pounds, about as much as a beagle ... Some deer bones had cuts indicating butchering ... The number of deer bones decreased in the youngest layer of the midden, and those of older adults were absent, suggesting that the species was becoming scarcer and life expectancies lower...

[Genetic structure and effective population sizes in European red deer \(*Cervus elaphus*\) at a continental scale: insights from microsatellite DNA](#) FE Zachos, AC Frantz, R

Kuehn, S Bertouille, M Colyn... - Journal of Heredity, 2016

... Calculations of genetic diversity and effective population sizes (linkage-disequilibrium approach) yielded the lowest results for Italian (Sardinia, Mesola; Ne between two and eight) and Scandinavian red deer, in line with known bottlenecks in these populations. Our study is the first to present comparative nuclear genetic data in red deer across Europe ...

[First phylogenetic analysis of Mesoamerican brocket deer *Mazama pandora* and *Mazama temama* \(Cetartiodactyla: Cervidae\) based on mitochondrial sequences: Implications on neotropical deer evolution](#)

LA Escobedo-Morales, S Mandujano, LE Eguiarte... 2016, Mammalian Biology

... the humid tropical forests of Mexico and Central America could have been the most likely place of origin of members of the red brocket deer clade. Deer colonization into South America occurred after the complete formation of the Panamanian land bridge in the late Pliocene, more than one ancestor of the gray brocket deer clade crossed into South America, as well as a red brocket deer ancestor and *Odocoileus* dispersed southward...

[De novo characterization of velvet skin transcriptome at the antlers tips of red deer \(*Cervus elaphus*\) and analysis of growth factors and their receptors related to regeneration](#)

Y XiaoGuang, C YanXia, L XueDong, L QingZhen... - Pakistan Journal of Zoology, 2016

The regeneration of antler velvet represents a new form of stem-cell-derived full skin regeneration, including associated appendages... The data generated in this study represent the most comprehensive sequence resource available for regenerating velvet skin in red deer antlers and provide a basis for further research on deer antler molecular genetics and functional genomics.

[Fujitsu wants to fix Japan's deer problem with software](#) January 18, 2016 Japan, Engadget

... Traditionally, these sorts of studies require a manual survey and plenty of theoretical calculations, but Fujitsu is hoping to build software that is significantly more accurate...
... Fujitsu would be interested in helping forest researchers build fences to keep deer penned in Rather than instituting a series of widespread culls that could do more harm than good ...

[Molecular detection and genetic characterization of Toxoplasma gondii infection in sika deer](#) (Cervus nippon) in China W Cong, SY Qin, QF Meng, FC Zou, AD Qian, XQ Zhu - Infection, Genetics and ..., 2016

The objective of the present study was to investigate the prevalence and genetic characterization of T. gondii infection in sika deer in China... results of the present study revealed the existence of T. gondii infection in sika deer in China, which provided the information of T. gondii genetic diversity in this host species. This study also indicated that ToxoDB Genotype #9 has a wide distribution in sika deer that could be potential reservoirs for T. gondii transmission, which may pose a threat to human health...

[Banning Trophy Hunting Will Exacerbate Biodiversity Loss](#) E Di Minin, N Leader-Williams, CJA Bradshaw - Trends in Ecology & Evolution, 2015

... International pressure to ban trophy hunting is increasing. However, we argue that trophy hunting can be an important conservation tool, provided it can be done in a controlled manner to benefit biodiversity conservation and local people. Where political and governance structures are adequate, trophy hunting can help address the ongoing loss of species....

[Effect of winter conditions on wild ungulates mortality in the Owl Mountains](#) (Poland) M Warchałowski, P Nowakowski, A Dancewicz - 2015

... The least adapted to local weather conditions was mouflon introduced to this area ca. 100 years ago from more southern parts of Europe. Roe deer species seems to be environmentally plastic, and are doing quite well in severe winters. Tolerance of red deer to the snow cover is much lower at low temperatures due to the fact that this species, during the period of snow cover, has limited access to the plants covered with snow and difficult access to food base.

[Long-Term Dynamics of Coxiella burnetii in Farmed Red Deer](#) (Cervus elaphus) D González-Barrio, IG Fernández-de-Mera, JA Ortiz... - Frontiers in Veterinary ..., 2015

...These results suggest that any strategy applied to control C. burnetii in deer herds should be designed to induce immunity in their first year of life immediately after losing maternal antibodies. The short average life of C. burnetii antibodies suggests that any protection based on humoral immunity would require re-vaccination every 6 months...

[Stem Cells, Stem Cell Niche and Mammalian organ Regeneration-Insights from Studying Deer Antler Biology](#) [PDF will download] C Li - SM Journal of Stem Cell Research, 2015

... Organ regeneration is the “Holy Grail” of modern regenerative medicine. To realize this dream, regenerative medicine must be underpinned by regenerative biology, which seeks to understand the mechanism of regeneration through investigation of different

model systems. Among these systems, deer antler stands out as the only mammalian appendage capable of complete renewal ...

[Playful Rocksalt System: Animal-Computer Interaction Design in Wild Environments](#)

H Kobayashi, K Muramatsu, J Okuno, K Nakamura... - 2015

... this paper presents an experimental interface of such non-verbal interaction for HCI application designs through an imaginable interaction with nature by a Playful Rocksalt system. In order to make the experience, this study achieves the goal through two subsystems, Panorama-viewer of forest and Remote animal sensing. The former is an application by which users can look out over the forest landscape in all directions with a gyro-sensor inside PDA...

[Chinese Water Deer \(*Hydropotes inermis*\) Reintroduction in Nanhui, Shanghai, China](#) [PDF]

Y Cai, E Pei, X Yuan - Pakistan J. Zool, 2015

... This communication reports some evidence of the reintroduced Chinese water deer surviving in the Nanhui Wildlife Sanctuary, Shanghai, China. Deer were still present in the sanctuary in 2014 and evidence of breeding was also recorded. Historically, the deer was last recorded in Shanghai in 1890. The Chinese Water Deer Reintroduction Project was started in Shanghai in 2006, in order to restore the native Chinese water deer population.

[Employing Ultrahigh-Frequency RFID Technology on Deer Farm Management](#) L

Hsiao-Mei, W Chih-Hwa, H Yan-Der, H Kuo-Hsiang - Indian Journal of Animal ..., 2015

... This project uses ultrahigh-frequency (UHF) ear tags and readers with a readable range of 3 to 5 m. Forty stags were tagged with radio-frequency identification (RFID) ear tags and allocated into 20 pens. When deer with RFID ear tags walked through the aisle, handheld RFID readers, used as personal digital assistants (PDAs), and stationary RFID readers in frequency range received signals from the tags, and individual deer tag data were transmitted immediately and completely through wireless PDAs to a computer. The inputted data were sent to the deer-farm management system to be collated and organized. Farmers obtained individual deer data without approaching the deer, which decreased the risk of the deer attacking. Employing UHF-RFID technology integrated with software contributes to enhancing the efficiency of deer identification and farm management.,,

[Predator exclusion as a management option for increasing white-tailed deer recruitment](#)

LM Conner, MJ Cherry, BT Rutledge, CH Killmaster... Journal of Wildlife Management, 2015

... In 2003, we constructed 4 40-ha mesopredator exclosures with the objective of quantifying the influence of mesopredators, including coyotes, on select wildlife populations and communities. Camera trapping indicated neonate/adult female white-tailed deer ratios were approximately 2 times greater inside predator exclosures than in control plots...

[Dispersal of reintroduced Chinese water deer after release in Nanhui East Shoal](#)

[Wildlife Sanctuary of Shanghai, China](#) X He, M Chen, E Zhang - Italian Journal of Zoology, 2015

... After becoming familiar with food distribution and shelter conditions, they dispersed further in order to avoid predation risk. In order to improve the survival rate of reintroduced deer, we suggest releasing the adult individuals of robust physique into the wild in future programmes, and more attention should be paid to the initial 9 days after releasing the species. Increasing the local experience of the captive-born animals and helping them become familiar with the new wild habitat will improve the survival rate in future reintroductions...

[Lead, cadmium and organochlorine pesticide residues in hunted red deer and wild boar](#)

[from northern Italy](#) F Caloni, M Chiari, C Cortinovis, M Bertolotti, L Alborali... - Food Additives & ..., 2015

... Over a period of 2 years, a total of 1055 and 210 masseters, 424 and 201 livers, 642 and 152 kidneys were collected from wild boar and red deer respectively The search for organochlorine pesticides in both red deer and wild boar produced negative results with values below the limits of detection. Due to the high levels of renal Cd and muscle Pb detected in wild boar and red deer, further research needs to be carried out in an effort to identify the source of contamination and preserve the health of animals and humans...

[The predator-prey power law: Biomass scaling across terrestrial and aquatic biomes](#)

September 4, 2015 Science, Ian A. Hatton, Kevin S. McCann, John M. Fryxell, T.

Jonathan Davies, Matteo Smerlak, Anthony R. E. Sinclair, Michel Loreau

... . We show a robust scaling law that emerges uniquely at the level of whole ecosystems and is conserved across terrestrial and aquatic biomes worldwide. This pattern describes the changing structure and productivity of the predator-prey biomass pyramid, which represents the biomass of communities at different levels of the food chain. Scaling exponents of the relation between predator versus prey biomass and community production versus biomass are often near $\frac{3}{4}$, which indicates that very different communities of species exhibit similar high-level structure and function...

[Woody Plants Affected by Ungulates in Winter Period, Impacts and Bark Renewal](#)

M Nevřelová, J Ružičková - Ekológia (Bratislava), 2015

... The main objective of this research was an assessment of ungulates, impact on woody species, evaluation of damage forms and bark renewal phases of affected woody plants. The study area is located in western Slovakia ... After the mild winter in 2014, the majority (93.7%) of previously affected *Fraxinus excelsior* trees in the forest locality had only old damages with renewed bark in different phases of regeneration. In the non-forest locality, 96% of young *Fraxinus excelsior*, damaged in the winter of 2013, shot up new sprouts. The mortality of affected trees was minimal (4–5%).

[How many are there? Multiple-covariate distance sampling for monitoring pampas deer in Corrientes, Argentina](#)

T Zamboni, A Delgado, I Jiménez-Pérez, C De Angelo - Wildlife Research, 2015

... Population surveys using covariate distance sampling on ground line transects can provide more realistic population estimates than do other simpler methods. Our population estimates and methods can be used as a baseline for future monitoring of this population, as long as factors such as sampling effort, type of roads for locating transects, and habitat type are considered in future analysis...

[Contrasting the Effects of Maternal and Behavioral Characteristics on Fawn Birth Mass in White-Tailed Deer](#)

ES Michel, S Demarais, BK Strickland, JL Belant - PloS one, 2015

... Maternal body mass displayed the strongest direct effect on fawn birth mass, followed by maternal age and social rank. Maternal body mass had a greater effect on social rank than age. The direct path between social rank and fawn birth mass may indicate dominance as an underlying mechanism. ..

[Genetic diversity and genetic structure of the Siberian roe deer \(*Capreolus pygargus*\) populations from Asia](#) YS Lee, N Markov, I Voloshina, A Argunov... - BMC Genetics, 2015

... Our results reveal an apparent pattern of genetic differentiation among populations inhabiting Asia, showing moderate levels of genetic diversity with an east-west gradient. The results suggest at least three distinct management units of roe deer in continental Asia, although genetic admixture is evident in some border areas. The insights obtained from this study shed light on management of Siberian roe deer in Asia and may be applied in conservation of local populations of Siberian roe deer...

[Density, occupancy, and activity pattern of two sympatric deer \(*Mazama*\) in the Atlantic Forest](#), Brazil ÁC Ferreguetti, WM Tomás, HG Bergallo - Journal of Mammalogy, 2015

... The red brocket (*Mazama americana*) and gray brocket deer (*Mazama gouazoubira*) are sympatric in the Atlantic Forest and present a number of ecological similarities in their diet and habitat use ... We conclude that, despite the abundance of these sympatric species, and their occupation of the same habitats, they may avoid competing for habitat and feeding resources through differences in their activity patterns...

[Developing genomic tools in the New Zealand Deer Industry](#) SJ Rowe, SM Clarke, TC Van Stijn, DL Hyndman... - Proceedings of the New ..., 2015

... The New Zealand deer industry currently uses genomic technology via microsatellite markers to assign parentage and breed. In many other species, microsatellites have been superseded by SNP markers, which are more abundant in the genome and technically easier to use. SNP assays or 'chips' that record thousands to hundreds of thousands of markers have now been developed in many species including humans, pigs and cattle...

[Wear Fast, Die Young: More Worn Teeth and Shorter Lives in Iberian Compared to Scottish Red Deer](#) FJ Pérez-Barbería, J Carranza, C Sánchez-Prieto - PLOS ONE, 2015

... These results illustrate how independent selection in both subspecies, that diverged 11,700 years BP, has resulted in the evolution of different longevity, although sexual selection has maintained a similar pattern of relative sex differences in tooth depletion. This study opens interesting questions on optimal allocation in life history trade-offs and the independent evolution of allopatric populations...

[Foraging competition in larger groups overrides harassment avoidance benefits in female reindeer](#) (*Rangifer tarandus*) S Uccheddu, G Body, RB Weladji, Ø Holand... - Oecologia, 2015

... Male harassment toward females during the breeding season may have a negative effect on their reproductive success by disturbing their foraging activity, thereby inducing somatic costs. Accordingly, it is predicted that females will choose mates based on their ability to provide protection or will aggregate into large groups to dilute per capita harassment level... these results rejected the dilution effect, but strongly supported the foraging competition hypothesis. This study therefore highlights a potential conflict in female behaviour. Indeed, any gains from harassment protection were negated by an increase of 6–7 females, since adult males lead larger groups than young males.

[A simple and effective method for obtaining mammal DNA from faeces](#) A Ramón-Laca, L Soriano, D Gleeson, JA Godoy - Wildlife Biology, 2015

... Results from these comparisons show that swabbing the samples in situ not only simplifies field collection and sample handling in the laboratory, but generally optimises target DNA recovery, minimises co-purification of PCR inhibitors and provides good quality DNA for the species tested, especially for herbivores. This method is also less time-consuming and more cost-effective ...

[Stabilization Points in Carrying Capacity: Population Growth and Migrations](#) [This link will download a PDF] A Diachenko, EBW Zubrow - Journal of Neolithic Archaeology, 2015

... Using simulations based upon well-known mathematical approaches in theoretical ecology, one calculates carrying capacity out of the trends in a demographic development. It is an alternative to most approaches in archaeology and anthropology concerning potential

resources and the cost of labor. Finally, this approach is also useful for the analysis of migrations and site catchments...

[Habitat and feeding ecology of alpine musk deer \(*Moschus chrysogaster*\) in Kedarnath Wildlife Sanctuary, Uttarakhand, India](#) Z Syed, O Ilyas - Animal Production Science, 2015

...The alpine musk deer, *Moschus chrysogaster*, a small member of family Moschidae, is a primitive deer threatened due to poaching and habitat loss, and therefore classified ...

The most preferred plant species of the animals were found to be *Gaultheria trichophylla*, *Ophiopogon intermedius*., *Cyperus* sp. and *Sibbaldia cuneata*. During the field survey, opportunistic sightings of the species were also recorded. The species was found to be restricted to areas where the density of preferred vegetation was high.

Therefore, it is recommended to provide strict protection to the areas such as Shokhark...

[Significance of woody browse preferences in evaluating the impact of sika deer browsing on tree seedlings](#) N Akashi, A Unno, K Terazawa - Journal of Forest Research, 2015

... the percentage or frequency of browsed twigs and seedlings is a useful index of the impact of deer on forests, differences in the browse preferences of deer among tree species should also be considered... The tract coefficients are considered to be an index of deer impact levels and can be estimated from the percentage of browsed seedlings for a species if the species coefficient is given. Simple percentages of browsed seedlings can also be used as an index of impact level, regardless of browse preferences, though these may be inaccurate, especially when the site is dominated by significantly preferred or avoided species...

[Evaluating the Effectiveness of Two Distance-Sampling Techniques for Monitoring Roe Deer \(*Capreolus capreolus*\) Densities](#) F Horcajada-Sánchez, I Barja - Annales Zoologici Fennici, 2015

... In this study, we compare the results of roe deer sampling based on distance detection performed by two techniques: surveys on foot in the evening and nocturnal surveys by car... when it is necessary to estimate absolute densities of roe deer populations, nocturnal distance sampling by car seems to be the most appropriate method due to its low cost, yet the influence of the vehicle on the distribution of roe deer and, therefore, on the estimated density, must be taken into account when carrying out such studies.

[Home range of reintroduced Chinese water deer in Nanhui East Shoal Wildlife Sanctuary of Shanghai, China](#) X He, M Chen, E Zhang - Animal Production Science, 2015

... The results show that: using the MCP method, the average home range size of Chinese water deer was estimated to be 671 ha (range 245-1559 ha), while using the 95% FKE method, the average was estimated to be 262 ha (range 43-435 ha). The average home range size of a buck was smaller than that of a doe by both MCP and FKE. The average home range size of an adult female was smaller than that of a sub-adult female. The largest seasonal home range size (MCP, 275 ha) occurred during the first year's winter, which then kept shrinking in spring and summer. Home range overlap was found among each individual's home range...

[Effectiveness of an acoustic wildlife warning device using natural calls to reduce the risk of train collisions with animals](#) J Babińska-Werka, D Krauze-Gryz, M Wasilewski... - ...

Research Part D: Transport ..., 2015

... The subject of study was the effectiveness of the UOZ-1 device – which emits the natural warning calls of animals – in protecting animals living near railway tracks... With sound signals emitted, animals escaped more often (84% vs. 68%), and their reaction to an oncoming train was 20 s faster. We found no proof that animals habituated to the warning signals ...

O Ilyas, Z Syed - Animal Production Science, 2015

... The Alpine musk deer *Moschus chrysogaster*, a small member of family Moschidae is a primitive deer threatened due to poaching and habitat loss ... the species is legally protected in India ... The study shows that the musk deer is predominantly a browser. The most preferred plant species of the animal were found to be *Gaultheria trichophylla*, *Ophiopogon intermedius*...

[Study on the Changes in Enzyme and Insulin-like Growth Factor-1 Concentrations in Blood Serum and Growth Characteristics of Velvet Antler during the Antler Growth Period in Sika Deer](#) [PDF] ... J Park, B Jeon, S Kang, M Oh, M Kim, S Jang, P Park... -

2015

... This study was conducted to investigate changes in blood enzyme parameters and to evaluate the relationship between insulin-like growth factor-1 (IGF-1), antler growth and body weight during the antler growth of sika deer ... it appeared that serum alkaline phosphatase

concentration was related to antler growth and both antler growth and body weight were associated positively with IGF-1 concentrations during antler growth.

[Dissimilar responses of the Gray brocket deer \(*Mazama gouazoubira*\), Crab-eating fox \(*Cerdocyon thous*\) and Pampas fox \(*Lycalopex gymnocercus*\) to livestock ...](#) AS Nanni

- Mammalian Biology-Zeitschrift für Säugetierkunde, 2015

... This study represents the first analysis of livestock influence over individual mammal species in NW Argentina forests. Through camera-trapping, I found a negative correlation between frequencies of occurrence of livestock (sheep, goats and cattle) and Gray brocket deer *Mazama gouazoubira*, and a modification of the daily activities patterns of the latter according to changes in density of the former. ...

[The difference conservation makes to extinction risk of the world's ungulates](#)

M Hoffmann, JW Duckworth, K Holmes, DP Mallon... - Conservation Biology, 2015

... We estimated that without conservation at least 148 species would have deteriorated by one International Union for Conservation of Nature (IUCN) Red List category, including 6 species that now would be listed as extinct or extinct in the wild. The overall decline in the conservation status of ungulates would have been nearly 8 times worse than observed. This trend would have been greater still if not for conservation on private lands....

[Admixture of Eastern and Western European Red Deer Lineages as a Result of Postglacial Recolonization of the Czech Republic \(Central Europe\)](#) J

Krojerová-Prokešová, M Barančková, P Koubek - Journal of Heredity, 2015

... Due to a restriction of the distributional range of European red deer (*Cervus elaphus* L.) during the Quaternary and subsequent recolonization of Europe from different refugia, a clear phylogeographical pattern in genetic structure has been revealed using mitochondrial DNA markers...

[Population Density of the Endangered Forest Musk Deer, *Moschus berezovskii*, in China](#) [PDF] G Yao, BB Wang, Y Zhu, QH Wan, SG Fang - Pakistan J. Zool, 2015

... Our results suggested the indices of abundance varies according to the geographical variation, which may attribute to the economic imbalance between eastern part and western in China. In addition, many human disturbances were present in the habitat of Chinese forest musk deer. Extensive poaching was currently being practiced, as revealed by our field observation of 0.14 snares/km². In addition, the population trend in Mayuhe and Yele seemed to be decreasing...

[Large impact of eurasian lynx predation on roe deer population dynamics.](#) H Andrén, O Liberg - PloS one, 2015

... this study suggests that lynx predation together with density dependent factors both influence the roe deer population dynamics...

[Scientists reveal prehistoric animal lived some 2,000 years after 'extinction'](#) March 21, 2015 Russia, Siberian Times

... known as the Irish Elk, a massive creature that stood 7ft (2 meters) tall and had antlers up to 10ft (up to 3.5 meters) wide, all but died out at around the time of the end of last Ice Age about 10,300 years ago. ... in the highly-ranked scientific journal, Quaternary Science Reviews, the experts have extended the early Holocene habitat of the animal at least 2,400km to the east...

[A review of the literature on benefits, costs, and policies for wildlife management](#)

T Häggmark, IM Gren, M Engelman, K Elofsson - 2015

... a common feature of both valuation and cost studies is the exclusion of several costs and benefits items and of indirect effects in the economies, which can be considerable for economies with high reliance on tourism and agriculture sectors. With respect to policy choice, the literature suggests economic incentives for conflict resolutions, where the winners from wildlife compensate the losses, but studies evaluating such policies in practice are lacking...

[Roe deer at risk: teasing apart habitat selection and landscape constraints in risk exposure at multiple scales](#)

S Padié, N Morellet, AJ Hewison, JL Martin, N Bonnot... - Oikos, 2015

... we provide an integrative multi-scale study of roe deer spatial responses to variable hunting pressure along a landscape gradient of open habitats and dispersed refuges ... We found that when risk was high, roe deer did not shift their home-range, but generally decreased their use of risky habitats, and sometimes reduced their distance to cover (particularly older animals). There was a functional response in between-habitat selection, with animals living in more open landscapes responding more than those living in landscapes with more refuges. However, individuals living in more open landscapes avoided open risky habitat less ...

[The genetic landscape of the Iberian red deer \(*Cervus elaphus hispanicus*\) after 30 years of big-game hunting in southern Spain](#)

JA Galarza, B Sanchez-Fernandez, P Fandos... - ... of Wildlife Management, 2015

... The Iberian red deer (*Cervus elaphus hispanicus*) suffered a striking collapse of its populations during the first half of the 20th century due to excessive hunting. In Andalusia, southern Spain, re-colonization took place from a few relict populations through natural dispersal, and through artificial reintroductions for big-game hunting ...

We suggest that new herds should be established using individuals from the different genetic clusters, and a careful monitoring of the breeder's genetic background to prevent further inbreeding and inadvertent hybridization...

[Schematizing a historical demographic collapse on a large time span using local, secondary and grey data: the case of Italian roe deer *Capreolus capreolus italicus* in ...](#)

C Battisti, A Di Gennaro, S Gippoliti - Journal for Nature Conservation, 2015

... We recognized three historical phases and one sub-phase of demographic reduction and collapse: “Aristocratic hunting” phase (15th Century), “Fire weapons and people hunting” phase (from 16th to 18th Century), “Habitat collapse” phase (19th and 20th Century), with a sub-phase of “genetic introgression” beginning in the 1940s...

[Complete mitochondrial genome of a wild Alashan Red Deer \(*Cervus elaphus alxaicus*\)](#)

Z Liu, J Wang, Y Sun, Z Hou, L Teng - Mitochondrial DNA, 2015

... the complete mitochondrial genome of a wild red deer from Helan Mountain, China was sequenced and annotated newly. The total length of the mitochondrial genome is 16,428 bp, with a base composition of 33.3% A, 28.8% T, 24.4% C and 13.5% G, and it contains 12S rRNA gene, 16S rRNA gene, 22 tRNA genes, 13 protein-coding genes and 1 control region...

[Coupling scale-specific habitat selection and activity reveals sex-specific food/cover trade-offs in a large herbivore](#)

P Marchand, M Garel, G Bourgoin, D Dubray... - Animal Behaviour, 2015

... during hunting, when food was also scarce, both sexes selected home ranges with high proportions of the habitats perceived as safe, in which they performed all their activities. This result suggested that risk avoidance exceeded all the other individual and environmental factors in the hierarchy of the determinants of habitat selection during the hunting period...

[High Juvenile Mortality Is Associated with Sex-Specific Adult Survival and Lifespan in Wild Roe Deer](#)

M Garratt, JF Lemaître, M Douhard, C Bonenfant... - Current Biology, 2015

... We show that sex differences in adult survival and lifespan in cohorts of roe deer (*Capreolus capreolus*) range from virtually absent in some years to females living 30% longer than males in others. The extent of this sex difference in adult longevity is strongly linked to the level of mortality each cohort experiences as juveniles, with high juvenile mortality generating a strong sex difference in both adult survival and lifespan. In females, high juvenile mortality leads to increased adult survival for those remaining individuals, whereas in males survival is actually reduced...

[Deer populations inhabiting urban areas in the south of Spain: habitat and conflicts](#)

J Duarte, MA Farfán, JE Fa, JM Vargas - European Journal of Wildlife Research, 2015
... We found a significant increase in the density of both these deer species in the area following the rezoning, probably due to the creation of more favourable habitat for deer and the cessation of hunting activity. Deer preferred the urbanised areas and especially the golf courses...

[Do relatives like to stay closer? Spatial organization and genetic relatedness in a mountain roe deer population](#)

D Bioss, S Grignolio, N Sica, N Pagon, M Scandura... - Journal of Zoology, 2015

... We found that genetic relatedness tended to increase with home range proximity, but mostly in winter. Nevertheless, when the extent of overlap between seasonal home ranges with respect to genetic relatedness was considered, males and females seemed to preferably share their home range with relatives of the same sex, reducing the overlap with relatives of the opposite sex during the rutting period. We conclude that home range rearrangements during the breeding season may afford a certain level of spatial segregation between closely related potential mates, thus reducing inbreeding risk.

[DNA left on browsed twigs uncovers bite-scale resource use patterns in European ungulates](#)

RV Nichols, JPM Crooms, G Spong - Oecologia, 2014

... Although the deer species differed in mean browsing height, species were comparable in terms of their minimum browsing height of ~20 cm. This means that height and diameter ranges of the smaller species were found to be completely inside the ranges of the larger species. Hence, while moose may access exclusive food resources in terms of browse height and diameter, red and roe deer cannot.

[Improving broad scale forage mapping and habitat selection analyses with airborne laser scanning: the case of moose](#)

K Lone, FM van Beest, A Myrseth, T Gobakken... - Ecosphere, 2014

... Airborne laser scanning (ALS) can give direct and detailed measurements of vegetation structure. We assessed the effectiveness of ALS data to predict (1) the distribution of browse forage resources and (2) moose (*Alces alces*) habitat selection in southern Norway... The auxiliary information on vegetation structure from ALS improved the prediction of browse moderately, but greatly improved the analysis of habitat selection, as it captured important functional gradients in the habitat apart from forage. We conclude that ALS is an effective and valuable tool for wildlife managers and ecologists to estimate the distribution of large herbivores...

[Multiple pathways mediate the effects of climate change on maternal reproductive traits in a red deer population](#) KV Stopher, AI Bento, TH Clutton-Brock, JM Pemberton... -

Ecology, 2014 United Kingdom

... In general, warmer temperatures were associated with earlier birth dates and greater birth mass, and higher rainfall was associated with reduced juvenile survival and reduced female fecundity. We also examined concurrent effects of population density, maternal age, and reproductive history, and found that temporal stasis in average trait values, at least in part, could be explained by antagonistic roles of direct and indirect effects of changing climate and increasing population density...

[Winter diet of introduced red deer \(*Cervus elaphus*\) in woodland vegetation in the Grampians National Park, western Victoria.](#) C Roberts, M Westbrooke, S Florentine, S

Cook - Australian Mammalogy, 2014

... This study found that red deer show significantly different dietary intake due to sex; with females consuming a diet much higher in grasses, while males consume more trees and shrubs...

[The contribution of deer velvet antler research to the modern biological medicine.](#)

YS Huo, H Huo, J Zhang - Chinese journal of integrative medicine, 2014

... Deer velvet antler is the only mammal organ which can continuous regenerate... The international antler research has entered the stage of molecular biology, and will no doubt have a profound impact on the modern biomedical fields, such as regenerative medicine, organ degeneration and dysplasia, trauma medicine and anti-inflammatory treatment, growth factor research, as well as creation of new medical thinking...

[Gastrointestinal parasites in an isolated Norwegian population of wild red deer \(*Cervus elaphus*\)](#) [PDF] RK Davidson, SJ Kutz, K Madslien, E Hoberg... - Acta Veterinaria ..., 2014

... This isolated population was parasitised by a reduced subset of gastrointestinal nematodes typical of this cervid across an extensive geographic range in Eurasia. The intensity and abundance of abomasal nematodes was higher in this isolated population than reported in similar studies of red deer populations across Europe...

[Using zero-inflated models to predict the relative distribution and abundance of roe deer over very large spatial scales](#) Y Bouyer, T Rigot, M Panzacchi, B Van Moorter... -

Annales Zoologici Fennici, 2015

... In Norway, recovering populations of large carnivores commonly prey on roe deer (*Capreolus capreolus*). Understanding predator habitat use and ecology requires fine-scaled information on prey distribution and abundance. However, the massive spatial scales at which large carnivores use the landscape presents many practical and statistical challenges for developing functional prey distribution models... The map generated can facilitate both the study of broad scale processes linking predators and prey as well as roe deer management in southeastern Norway.

[Population control based on abundance estimates: Frequency does not compensate for uncertainty](#) R Hagen, S Kramer-Schadt, L Fahse, M Heurich - Ecological Complexity, 2014

... we developed an age-structured population model for roe deer, one of the most common ungulates in Europe. The model simulates hunting processes that are affected by uncertainties related to abundance estimates and species demography. The results indicated that uncertainty related to abundance estimates largely reduced the ability to achieve target population densities. Surprisingly, this effect was not weakened by more frequent estimations. We conclude that decreasing the interval of abundance estimates counterintuitively cannot compensate for lacking accuracy.

[Ungulate browsing on conifers during summer as revealed by DNA](#) RV Nichols, G Spong - Scandinavian Journal of Forest Research, 2014

... Across Sweden, ungulate communities comprise multiple coexisting species, making it a challenge to determine which herbivore species have caused the browsing damages... Browsed twig samples were sent to us so that we could identify the responsible browsing species using DNA. We discovered that 73.7% of the damages were actually attributable to moose with 24.7% caused by red deer and 1.5% by fallow deer...

[Habitat Use of Sichuan Sika Deer in Forest, Bush and Meadows in the Tiebu Nature Reserve, Sichuan, China](#) C Zhao, J Hu, Y Li, J Ran, J Guan, C Yang, Y Xiong... - Pakistan J. Zool, 2014

... In forest, Sichuan sika deer preferred the sites with a high density of herbs. In bush, Sichuan sika deer's occurrence was significantly correlated with greater distances from habitations and shorter distances to water. In meadows, Sichuan sika deer preferred the sites with gradual slopes and proximity to water. Water and disturbance could be treated as key factors that influence the habitat use of Sichuan sika deer in meadow and bush habitat. Food availability may affect the habitat use of Sichuan sika deer in forest and bush. Thus, protecting all three vegetation types is one of the important objectives for the conservation of the endangered Sichuan sika deer...

[Does hunting threaten timber regeneration in selectively logged tropical forests?](#)

C Rosin - Forest Ecology and Management, 2014

... Vertebrate seed dispersers are often heavily hunted, resulting in reduced seed movement for many species and a shift in community composition to favor those plants dispersed by small animals and abiotic means. Timber species with large seeds and fleshy fruit are at particular risk for dispersal and recruitment failure. Hunting also alters granivore communities, resulting in increased predation on species favored by insects and small rodents, and changing the spatial template of seed predation, with detrimental effects on many timber species. Large vertebrate herbivores decline with hunting pressure, resulting in the modification of plant competitive interactions. This is disadvantageous to several traits that are common among timber trees, including relatively slow growth and high wood density...

[Browsing preference and ecological carrying capacity of sambar deer \(*Cervus unicolor brookei*\) on secondary vegetation in forest plantation](#)

D Ismail, D Jiwan - Animal Science Journal, 2014

... at Sabal Forest Reserve in Sarawak, Malaysia... Sambar deer were found foraging on only 29 out of 42 species of secondary vegetation in the acacia plantation... Planted species, *Shorea macrophylla* are not palatable to the deer. This augurs well for the integration of sambar deer into shorea plantations. ... Given its contribution to the conservation of wildlife and its capacity to sustain the ecosystem, the sambar deer integrated farming system offers a promising strategy for the future of tropical forestry management.

[Managing landscapes for multiple objectives: alternative forage can reduce the conflict between deer and forestry](#)

A Jarnemo, J Minderman, N Bunnefeld, J Zidar... - Ecosphere, 2014

...Deer (Cervidae) cause considerable damage to forest plantations, crops, and protected habitats. The most common response to this damage is to implement strategies to lower population densities ... On the landscape scale, damage level was negatively related to availability of forage in the field and shrub layers and proportion forest, but was not related to any of the relative deer density indices. Increasing alternative forage may thus decrease damage and thereby reduce conflicts. Additionally, the proportion of forest in the landscape affects damage levels and should thus be considered in landscape planning and when forecasting damage risk...

[Early life expenditure in sexual competition is associated with increased reproductive senescence in male red deer](#)

JF Lemaître, JM Gaillard, JM Pemberton... - Proceedings of the Royal ..., 2014

... The evolutionary theories of senescence predict that investment in reproduction in early life should come at the cost of reduced somatic maintenance, and thus earlier or more rapid senescence... Males that carried antlers with more points during early life did not show more pronounced declines in reproductive traits in later life ...

[Capture myopathy in a corsican red deer *Cervus elaphus corsicanus* \(Ungulata: Cervidae\)](#) S Nuvoli, GP Burrai, F Secci, N Columbano... - Italian Journal of Zoology, 2014

... The present study focused on the importance of translocation as stressful event in an endangered cervid species causing fatal consequences during capture operations. Fourteen free-ranging Sardinian red deer (*Cervus elaphus corsicanus*) have been captured for restocking ... Sixteen hours after the release, a pregnant hind was found dead and a complete necropsy was performed. Post-capture blood samples showed increased levels of creatine kinase, lactate dehydrogenase, cortisol and potassium and were highly indicative of stress-linked muscle damage...

[Deer antler—A novel model for studying organ regeneration in mammals](#)

C Li, H Zhao, Z Liu, C McMahon - The International Journal of Biochemistry & Cell ..., 2014

... Deer antler is the only mammalian organ that can fully grow back once lost from its pedicle – the base from which it grows. Therefore, antlers probably offer the most pertinent model for studying organ regeneration in mammals ... Taken together, a greater understanding of the mechanisms that regulate the regeneration of antlers may provide a valuable insight to aid the field of regenerative medicine...

[Deer in Britain: population spread and the implications for biodiversity](#) July 4, 2014 G Palmer - 2014

... I estimated, for the first time, the rate and pattern of the future spread of deer at a landscape scale across Britain, using a spatially explicit population model (SEPM)... The SEPM performed well in describing the observed spread of roe, red and muntjac deer in Britain between 1972 and 2007, and predicted the spread of, and overlap between, species to continue to increase in the future...

[Effects of deer bone extract on the expression of pro-inflammatory cytokine and cartilage-related genes in monosodium iodoacetate-induced osteoarthritic rats](#) H Lee, HS Choi, Y Park, CW Ahn, SU Jung, SH Park... - Bioscience, Biotechnology, ..., 2014

... The deer bone extract significantly suppressed the expression of matrix metalloproteinases (MMPs) mRNAs in the cartilage. The deer bone extract induced the up-regulation of COL2 and TIMP mRNAs and the down-regulation of MMP mRNAs by suppressing the expression of pro-inflammatory cytokine mRNAs. Deer bone extract

alleviated inflammatory symptoms by altering the expression of pro-inflammatory cytokine in osteoarthritic rats.

[Long-term morphological changes in the skeleton of red deer \(Artiodactyla, Cervidae\) at its northern periphery](#) J Rosvold, I Herfindal, R Andersen, AK Hufthammer - Journal of Mammalogy, 2014

... Using a data set on the skeletal morphology of Norwegian red deer (Artiodactyla, Cervidae: Cervus elaphus) spanning the last approximately 7,100 years, we document an inverse relationship between climatic conditions and body size. The size of Norwegian red deer, as estimated from both teeth and weight-bearing bones, was significantly larger during the warmer and wetter middle Holocene than it is today ... Decreased body size may be a general response in wild ungulates to a more human-dominated landscape, resulting from reduced access to optimal habitats and high adult hunting mortality.

[Home Range Shift and Dispersal of Red Deer: Implications for Establishing Nature Reserve Networks in China](#) WD Bao, XW Zhou, SL Zhang, K Shi - Advanced Materials Research, 2014

... Our results indicated that a connected nature reserve network is needed to protect wild ungulates in China....

[Reproduction of caucasian red deer in Azerbaijan](#) [PDF] SM Guliyev - Annals of Biological Research, 2014

... The paper contains information about reproductive features of Caucasian noble deer in Azerbaijan. Results of observations conducted in Greater and Lesser Caucasus natural regions in 1986-2012 are analyzed in comparative aspect. The differences in stages of reproductive processes depending on habitats were revealed...

[Behavioral measure of the light-adapted visual sensitivity of white-tailed deer](#)

BS Cohen, DA Osborn, GR Gallagher, RJ Warren... - Wildlife Society Bulletin, 2014

... We compared intensity thresholds at the short and long wavelengths of their purported visual spectrum. Utilizing an automated training device, we trained deer to discriminate between lit and unlit light-emitting diode (LED) lights ... We confirm that these cone photoreceptors contribute to deer behavior, and that deer have a greater perceptual sensitivity to shorter wavelengths and lower sensitivity to longer

wavelengths. Our findings also suggest the deer have some sensitivity to ultraviolet light...

[Pinus sylvestris sapling growth and recovery from mammalian browsing](#)

JM O'Reilly-Wapstra, BD Moore, M Brewer, J Beaton... - ... Ecology and Management, 2014

... we examine the genetic basis of recovery of Scots pine saplings following browsing by red deer ... These data, matched with our finding of no negative relationships between any recovery traits, indicate that Scots pine is quite robust to once-off browsing events by deer. We suggest that at the sapling stage, Scots pine do not employ resistance as a strategy against deer, but tolerate deer browsing to counteract the negative impacts of herbivory. Hence, the use of recovery traits as a management tool to mitigate the negative impacts of browsing is an option worthy of further investigation.

[A note on the effectiveness of incorporating management objectives with ecological variables when modeling red deer abundance](#)

M Martínez-Jauregui, AC Herruzo - European Journal of Wildlife Research, 2014

... We have found that the main land use of the area where red deer are being raised, the type of hunting holder, and the long-term management strategies (such as fencing and the hunting practices implemented) significantly explain red deer hunting bag, which is often used as proxy of population abundance. Therefore, ecological variables alone are not always sufficient to determine big game harvests...

[Hormone levels linked to survival of deer calves, study suggests](#)

March 27, 2014
Phys.org

... First-born male deer that have relatively high levels of the male hormone testosterone are less likely to survive their first year compared with their peers, the research shows... Male deer born in the years after an older brother had lower testosterone levels than other calves...

[Reliable Discrimination of 10 Ungulate Species Using High Resolution Melting Analysis of Faecal DNA](#)

[HTML] A Ramón-Laca, D Gleeson, I Yockney, M Perry... - PLOS ONE, 2014

Identifying species occupying an area is essential for many ecological and conservation studies. Faecal DNA is a potentially powerful method for identifying cryptic mammalian species... Our HRM method enables high-throughput and cost-effective species identification from low DNA template samples, and could readily be adapted to discriminate other mammalian species from faecal DNA.

[Reversible Immobilization of Free-ranging Red Deer \(*Cervus elaphus*\) with Xylazine-Tiletamine-Zolazepam and Atipamezole](#) C Sente, EL Meisingset, AL Evans, SJ Wedul... - Journal of Wildlife Diseases, 2014

... Forty-eight free-ranging red deer (*Cervus elaphus*) were immobilized with xylazine (X) and tiletamine-zolazepam (TZ) by dart injection during winter 2008 in Norway... Time to standing/walking in calves and adults was 12 ± 7 min and 12 ± 11 min, respectively. Two capture mortalities occurred.

[Effects of Capture-Related Injury on Postcapture Movement of White-Tailed Deer](#) AC

Dechen Quinn, DM Williams, WF Porter... - Journal of Wildlife Diseases, 2014

... We captured and global positioning system-collared 95 white-tailed deer (*Odocoileus virginianus*) in central and northern New York during 2006–2008. Six juveniles died within 30 days postrelease, and necropsy reports indicated that two suffered CM (2%)... These results suggest that deer likely to die within the 30-day CM window can be identified soon after capture, provided that intensive movement data are collected. Further, even if necropsy reports are unavailable, these animals should be censored from analysis because their behavior is not representative of movements of surviving animals...

[The tragedy of the commons: unsustainable population structure of Iberian red deer in hunting estates](#)

J Torres-Porras, J Carranza, J Pérez-González... - European Journal of Wildlife ..., 2014

Hunting can influence population structure with consequences in ecological and evolutionary processes. Populations of Iberian red deer (*Cervus elaphus hispanicus*) in Spain occur under two different management regimes:.. There is published evidence for undesirable effects of biased population sex ratio and age structure in these red deer populations. Our results indicate that this type of management may be unsustainable and recommend that harvest on males in open estates should be reduced and that on females increased, in order to maintain a more balanced population structure that may allow sustainable population dynamics and the operation of natural evolutionary processes.

[Living and dying in a multi-predator landscape of fear: roe deer are squeezed by contrasting pattern of predation risk imposed by lynx and humans](#)

K Lone, LE Loe, T Gobakken, JDC Linnell, J Odden... - Oikos, 2014

... Norway ... we investigated how predation risk was related to terrain attributes and vegetation classes/structure. As predicted, we found that increasing cover resulted in a contrasting lower predation risk from humans and higher predation risk from lynx.

Greater terrain ruggedness increased the predation risk from both predators. Hence, multiple predators may create areas of contrasting risk as well as double risk in the same landscape...

[An assessment of Zoonotic and Production Limiting Pathogens in Rusa Deer \(*Cervus timorensis rusa*\) from Mauritius](#) F Jori, J Godfroid, AL Michel, AD Potts, MR Jaumally... - Transboundary and Emerging Diseases, 2013

A population of approximately 70 000 rusa deer (*Cervus timorensis rusa*) represents the most important mammal species reared for food on the island of Mauritius The results obtained suggest that the population of rusa deer from Mauritius is exposed to a wide range of pathogens which may affect their productivity. In addition, the results highlight the potential public health risks incurred by deer industry workers and consumers. This survey fills an important gap in knowledge regarding the health of tropical deer meat in Mauritius and justifies the need to implement more regular surveys of selected pathogens in the deer population.

[\[PDF\] Current Status of the Critically Endangered South China Sika Deer and Its Dispersal Out of the Protected Area: Effects of Human Activity and Habitat Alteration](#)

C Li, X Ping, X Lu, W Liu, H Zhu - J Biodivers Endanger Species, 2013

South China sika deer (*Cervus nippon kopschi*) is a critically endangered cervid subspecies. To learn the current status of the largest population of south China sika deer in Taohongling Nature Reserve, we monitored the changes of population size from 1980 to 2011. Our survey indicated that deer population size in the core area of the reserve increased from 90 in 1983 to 312 in 1998, then decreased to 160 in 2005, and again increased to 275 in 2007 and 365 in 2011... . To provide better environment for wild sika deer, we suggest that: some measures such as prescribed burning and slash logging should be taken for restraining the arboreal succession in the reserve; deer farms of *Cervus nippon hortulorum* around the reserve should be reduced or removed; appropriate human activity such as restricted firewood collection might be allowed in the reserve.

[\[HTML\] Severe population decline of marsh deer, *Blastocerus dichotomus* \(Cetartiodactyla: Cervidae\), a threatened species, caused by flooding related to a hydroelectric](#) ... A Andriolo, U Piovezan, MJR Costa, HA Torres... - Zoologia (Curitiba), 2013

... Prior to flooding, the marsh deer was distributed widely throughout the dam's catchment area; however, the marsh deer habitat was almost completely destroyed by the flooding process. This situation highlights the need to implement management strategies that ensure the survival of the remaining fragmented population...

[Genetic shifts in the transition from wild to farmed white-tailed deer \(*Odocoileus virginianus*\) population](#) PM Hernández-Mendoza, GM Parra-Bracamonte... - ...

Services & Management, 2013

... The white-tailed deer (*Odocoileus virginianus*) is one of the most important species related to sport hunting in northern Mexico. During the last decade, this species has been subjected to intensive breeding to achieve improvements in certain desired traits (i.e., antlers). This alleged intensive management of bringing originally wild populations into captivity might have harmful consequences on genetic diversity. In this short research paper we estimate and discuss the consequences of that transition, as assessed by a microsatellite genetic marker analysis. The results show that no short-term changes in genetic diversity parameters were promoted by captivity; however, a genetic diversity condition maintained by artificial genetic flow was identified, perhaps allowing for the required introgression of gene diversity into this closed population.

[Optimal harvesting of an age-structured, two-sex herbivore–plant system](#) O Tahvonen, J Kumpula, AJ Pekkari - Ecological Modelling, 2014

... This study presents an optimal harvesting model for the semi-domesticated reindeer ... Density dependence at optimal equilibrium is realized in calf weight and in the average number of calves per female. Optimal slaughtering is concentrated on six-month-old calves. Adult females are slaughtered at the age of 9.5 years and males at the age of 5.5 years. A moderate or high interest rate increases the steady state reindeer population but decreases pasture conditions. Dynamic solutions deviate from constant escapement, implying that the optimal recovery from initially overgrazed pastures is slower than suggested in existing studies and actual policy. The shadow value for males is three times higher than for females...

[Effect of Concentrate Supplementation on Feed Consumption, Nutrient Utilization and Blood Metabolite Profile in Captive Spotted Deer \(*Axis axis*\) \(Avena sativa\) and Berseem \(*Trifolium alexandrinum*\) Fodders Based Diet](#) C Suresh, A Das, S Katole, M Saini, D Swarup - Zoo Biology, 2013

This experiment was conducted to determine the optimum level of a maize–soybean meal–wheat bran concentrate supplement fed to captive spotted deer fed an oat and berseem fodder-based diet. Twelve adult spotted deer [64–76 kg body weight (BW)] were distributed into three groups of four each and were housed individually Supplementation of forage only diet with 0.5 kg of concentrate mixture increased intake and digestibility of nutrients, without change in body mass. Animals fed 1 kg of supplementary concentrate received energy in excess of requirements, were

consistently gaining body mass and were prone to obesity. Thus, it is a right strategy to supplement forage only diet of captive spotted deer with 0.5 kg of concentrate.

[Evaluation of Camera Trap Surveys for Estimation of Sika Deer Herd Composition](#)

T Ikeda, H Takahashi, T Yoshida, H Igota, K Kaji - Mammal Study, 2013

... Camera trap method has been developed for monitoring wildlife, however, most studies using camera trap depend on baited camera sites to attract target wildlife. This is likely to bias estimates of population structure. We evaluated the use of non-baited camera trap for the estimation of herd composition of sika deer ... Camera trap method is superior in term of continuously conduct in long-term, collect reasonable seasonal patterns, automatically record large numbers of sample sizes and useful in all weather conditions.

[Edges, exotics and deer: the seed bank of a suburban secondary successional temperate deciduous forest](#)

VB Beauchamp, N Ghuznavi, SM Koontz, RP Roberts - Applied Vegetation Science, 2013

... Reliance on the soil seed bank as a passive restoration strategy will be insufficient for restoring a mature secondary successional suburban forest community. However, a suite of shade-tolerant exotic shrubs and vines that are of concern to management do not appear to use the seed bank, indicating that targeted removal of these species may be successful. Increased deer browse was associated with decreased seed bank abundance and richness, suggesting that deer may directly reduce inputs to the seed bank. If deer are impacting seed bank composition, active restoration will need to include understorey herbs in addition to overstorey species.

[Ranging behaviour and reproductive rate in the threatened population of roe deer in Gargano, South Italy](#)

V Aiello, S Lovari, A Bocci - Italian Journal of Zoology, 2013

... The seasonal median home range size of does ranged significantly between 16 ha, in spring, and 43 ha, in the cold months. Monthly home range size of does did not change significantly in daylight, night and twilight. The reproductive success (fawns:female) of our radiotagged does was very low (0.8–1.3 vs the expected 2) in both years of study, contrasting with the normal productivity of roe does, especially when density is low.

[Sexual segregation in red deer: is social behaviour more important than habitat preferences?](#)

J Alves, AA da Silva, AMVM Soares, C Fonseca - Animal Behaviour, 2013

... used 5 years of direct observations of animals. Adult males and sexually active females showed complete segregation during the year except in the rut and autumn

seasons, showing that a red deer tends to be aggregated with its peers outside the reproductive period. The results suggested that red deer segregated not only by sex, but also between age classes, indicating that sexual segregation hypotheses need to explain more than differences between sexes. Furthermore, both social behaviour and habitat preferences contributed significantly to sexual segregation, indicating that this phenomenon results from different choices made by males and females with respect to security and food availability in their living areas and dissimilar social behaviour of different sexes and age classes.

[The endangered *Dama dama mesopotamica* Brooke, 1875: genetic variability, allelic loss and hybridization signals \[HTML\]](#) JL Fernández-García - Contributions to Zoology, 2012

The Persian fallow deer (*Dama dama mesopotamica*) formerly widespread in the Middle East was described scientifically at the end of the 19th century and considered extinct ever since. In 1956 it was rediscovered in south-western Iran. As a result, several countries have undertaken actions to reintroduce this subspecies in its native territory.... Persian fallow deer studied here belong to two pre-defined genetics groups: the wild and the (more genetically impoverished) captive populations of Persian fallow deer. Finally, the Persian fallow deer deserves a high conservation priority, both in the Iranian stock and in the captive populations, so as to avoid hybridization.