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Exotic pet medicine: special journal issues

Database: CAB Abstracts <2000 to 2017 Week 48>
Search Strategy:
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1 (mouse or mice or rat or rats or gerbil* or hamster* or degu* or jerboa or "guinea pig*" or chinchilla* or duprasi* or chipmunk*).mp.
2 ("prairie dog*" or "rabbit*" or "sugar glider*" or ferret* or otter* or hedgehog* or tortoise* or turtle* or terrapin*).mp.
3 (parrot* or macaw* or cockatoo* or lovebird* or cockatiel* or budgerigar* or mynah* or canar* or finch* or toucan*).mp.
4 ("bearded dragon*" or gecko* or iguana* or chameleon*).mp.
5 (lizard* or snake* or frog* or toad* or "freshwater fish*" or goldfish* or "ornamental fish*" or "marine fish*" or "racing pigeon*" or "bird* of prey*" or crocodilian* or "cage bird*" or "aviary bird*" or callitrichid* or cebid* or lemur*).mp.
6 (exotic and (companion* or animal* or pet or pets)).mp.
7 (special and (issue* or collection* or publication* or edition* or section*)).mp.
8 1 or 2 or 3 or 4 or 5
9 6 and 7 and 8

****

[mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]

Relevant references selected from CAB Abstracts

<1>
Accession Number
20173345174
Author
Fitzgerald, K. T.
Title
Using amphibians as sentinels for environmental toxins: if we save the frogs, maybe we can save ourselves. (Special Issue: The David E. Bartlett Award for Lifetime Achievement in Theriogenology.)
Source
Clinical Theriogenology; 2017. 9(3):255-258. 7 ref.
Publisher
The Society for Theriogenology
Location of Publisher
Montgomery
Country of Publication
USA
Abstract
This article describes the threats faced by wild amphibians, including habitat loss, competition from invasive species, diseases and pollutants, human overpopulation and over-exploitation.

Publication Type
Journal article.

<2>
Accession Number
20173325079
Author
Clauss, M.; Hatt, J. M.
Title
Evidence-based rabbit housing and nutrition. (Special Issue: Evidence-based clinical practice in exotic animal medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(3):871-884.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Because most research on rabbit husbandry, welfare, and nutrition was performed on production animals, evidence for best practices in pet rabbits is scarce, and guidelines must be based on transfer of results, deduction, and common sense. Rabbits benefit from being kept with at least one conspecific; from large enclosures and multistory hutches; from drinking water offered ad libitum in open dish drinker systems; and from receiving hay ad libitum, with restricted amounts of fresh grass, herbs, or green leafy vegetables, and a high-fiber complete diet. Offering hay ad libitum bears several advantages and should be considered a matter of course.
Publication Type
Journal article.

<3>
Accession Number
20173325077
Author
Vergneau-Grosset, C.; Larrat, S.
Title
Evidence-based advances in aquatic animal medicine. (Special Issue: Evidence-based clinical practice in exotic animal medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(3):839-856.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Fish and aquatic invertebrates deserve evidence-based medicine. Pharmacologic information is available; most pharmacokinetic studies are derived from the aquaculture industry and extrapolated to ornamental fish. Conversely, advanced diagnostics and information regarding diseases affecting only ornamental fish and invertebrates require more peer-reviewed experimental studies; the examples of carp edema virus, sea star wasting disease, seahorse nutrition, and gas bubble disease of fish under human care are discussed.

Antinociception is also a controversial topic of growing interest in aquatic animal medicine. This article summarizes information regarding new topics of interest in companion fish and invertebrates and highlights some future avenues for research.
Publication Type
Journal article.

<4>
Accession Number
20173325075
Author
Jekl, V.; Hauptman, K.; Knotek, Z.
Title
Evidence-based advances in rodent medicine. (Special Issue: Evidence-based clinical practice in exotic animal medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(3):805-816.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
The number of exotic companion pet rodents seen in veterinary practices is growing very rapidly. According to the American Veterinary Medical Association's surveys, more than 2,093,000 pet rodents were kept in US households in 2007 and in 2012 it was more than 2,349,000 animals. This article summarizes the most important evidence-based knowledge in exotic pet rodents (diagnostics of the hyperadrenocorticism in guinea pigs, pituitary tumors in rats, urolithiasis in guinea pigs, use of itopride as prokinetics, use of deslorelin acetate in rodents, cause of dental disease, and prevention of mammary gland tumors in rats).
Publication Type
Journal article.

<5>
Accession Number
20173325074
Author
Minh Huynh; Chassang, L.; Zoller, G.
Title
Evidence-based advances in ferret medicine. (Special Issue: Evidence-based clinical practice in exotic animal medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(3):773-803.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
This literature review covers approximately 35 years of veterinary medicine. This article develops the current state of knowledge in pet ferret medicine regarding the most common diseases according to evidence-based data and gives insight into further axis of research. Literature review was conducted through

identification of keywords (title + ferret) with Web-based database searching. To appreciate the methodological quality and the level of evidence of each article included in the review, full-text versions were reviewed and questions addressed in the articles were formulated. Analysis of the articles' content was performed by the authors, and relevant clinical information was extracted.
Publication Type
Journal article.

<6>
Accession Number
20173325073
Author
Summa, N. M.; Brandao, J.
Title
Evidence-based advances in rabbit medicine. (Special Issue: Evidence-based clinical practice in exotic animal medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(3):749-771.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Rabbit medicine has been continuously evolving over time with increasing popularity and demand. Tremendous advances have been made in rabbit medicine over the past 5 years, including the use of imaging tools for otitis and dental disease management, the development of laboratory testing for encephalitozoonosis, or determination of prognosis in rabbits. Recent pharmacokinetic studies have been published, providing additional information on commonly used antibiotics and motility-enhancer drugs, as well as benzimidazole toxicosis. This article presents a review of evidence-based advances for liver lobe torsions, thymoma, and dental disease in rabbits and controversial and new future promising areas in rabbit medicine.
Publication Type
Journal article.

<7>
Accession Number
20173000338
Author
Kent, M. S.
Title
Principles and applications of radiation therapy in exotic animals. (Special Issue: Exotic animal oncology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(1):255-270.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract

Radiation therapy is a treatment modality for cancer that is widely used in veterinary medicine, although its use in exotic animal practice has remained limited. However, there are case reports and case series of treating birds, small mammals, and reptiles for a variety of cancers with radiotherapy with varied outcomes. In this article the basic principles of radiation therapy are reviewed and the literature regarding its use in exotic animal practice is summarized. Side effects of radiotherapy are also discussed.
Publication Type
Journal article.

<8>
Accession Number
20173000335
Author
Schoemaker, N. J.
Title
Ferret oncology: diseases, diagnostics, and therapeutics. (Special Issue: Exotic animal oncology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(1):183-208.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Neoplastic disease is common in ferrets. Approximately half of all tumors diagnosed in ferrets are located in the endocrine or hemolymphatic system. Many factors may influence the choice of treatment. Medical management of adrenal tumors has a greater disease-free period compared to adrenalectomy. In ferrets with an insulinoma, no difference is seen in the mean survival time of medically and surgically treated patients. Aside from medical and surgical treatment modalities, chemotherapy and radiation therapy have also been described in ferrets in other types of tumors. The outcome of these treatment modalities is not always favorable.
Publication Type
Journal article.

<9>
Accession Number
20173000334
Author
Zeeland, Y. van
Title
Rabbit oncology: diseases, diagnostics, and therapeutics. (Special Issue: Exotic animal oncology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(1):135-182.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Neoplasia has long been reported as a rare finding in rabbits, but over the past decades the number of reports on neoplastic disease in rabbits has risen considerably. Similar to other animals, neoplastic changes

may occur in any organ system, but the rate in which the organ systems are affected differs considerably. In rabbits, tumors have predominantly been found in the urogenital, hemolymphatic, and integumentary systems. This article discusses current insights on the etiopathogenesis, clinical signs, diagnosis, and treatment of the commonest neoplastic diseases in rabbits and offer guidelines for the correct diagnosis and treatment of the rabbit oncologic patient.
Publication Type
Journal article.

<10>
Accession Number
20173000333
Author
Hocker, S. E.; Eshar, D.; Wouda, R. M.
Title
Rodent oncology: diseases, diagnostics, and therapeutics. (Special Issue: Exotic animal oncology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(1):111-134.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Cancer incidence in rodent species varies dramatically from a common occurrence in mice and rats to just a limited number of documented cases in chinchillas and degus. This article summarizes common tumors, both benign and malignant, that have been reported to occur in rodents. Outlined are clinical signs, diagnostics, and treatments that have been described for rodents presenting with specific neoplasms.
Publication Type
Journal article.

<11>
Accession Number
20173000332
Author
Christman, J.; Devau, M.; Wilson-Robles, H.; Hoppes, S.; Rech, R.; Russell, K. E.; Heatley, J. J.
Title
Oncology of reptiles: diseases, diagnosis, and treatment. (Special Issue: Exotic animal oncology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(1):87-110.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Based on necropsy review, neoplasia in reptiles has a comparable frequency to that of mammals and birds. Reptile neoplasia is now more frequently diagnosed in clinical practice based on increased use of advanced diagnostic techniques and improvements in reptilian husbandry allowing greater longevity of these species. This article reviews the current literature on neoplasia in reptiles, and focuses on advanced diagnostics and therapeutic options for reptilian patients suffering neoplastic disease. Although most applied clinical reptile

oncology is translated from dog and cat oncology, considerations specific to reptilian patients commonly encountered in clinical practice (turtles, tortoises, snakes, and lizards) are presented.
Publication Type
Journal article.

<12>
Accession Number
20173000330
Author
Vergneau-Grosset, C.; Nadeau, M. E.; Groff, J. M.
Title
Fish oncology: diseases, diagnostics, and therapeutics. (Special Issue: Exotic animal oncology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(1):21-56.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
The scientific literature contains a wealth of information concerning spontaneous fish neoplasms, although ornamental fish oncology is still in its infancy. The occurrence of fish neoplasms has often been associated with oncogenic viruses and environmental insults, making them useful markers for environmental contaminants. The use of fish, including zebrafish, as models of human carcinogenesis has been developed and knowledge gained from these models may also be applied to ornamental fish, although more studies are required. This review summarizes information available about fish oncology pertaining to veterinary clinicians.
Publication Type
Journal article.

<13>
Accession Number
20173075301
Author
Takamura, N.
Title
Status and challenges of biodiversity assessment in freshwater ecosystems. [Japanese]
Source
Japanese Journal of Conservation Ecology; 2016. 21(2):117-124. 43 ref.
Publisher
Ecological Society of Japan
Location of Publisher
Kyoto
Country of Publication
Japan
Abstract
A research project assessing the state of freshwater biodiversity in East and Southeast Asia was conducted from 2011-2015 to underpin the biodiversity conservation policy of the Convention on Biological Diversity. We constructed a database on the distribution of aquatic organisms and their environments, selected priority sites for conservation, and determined the anthropogenic drivers of biodiversity loss in the freshwaters of Japan. This special issue shows a portion of our findings. For lakes, more than two-thirds of selected priority

sites were located in areas that were already protected; however, our assessment revealed that the species richness of both freshwater fishes and aquatic plants decreased markedly after 2001 compared with previous years. The total area of protected rivers and ponds was far beyond that proposed by the Aichi target. There were large gaps between selected sites and protected areas with rivers and wetlands. The major drivers of biodiversity loss were exotic piscivorous fishes and eutrophication in lakes and ponds, and habitat fragmentation in rivers. We found that the distribution data of indicator species were insufficient for proper assessment, and were particularly lacking in static waters (lakes, ponds, and wetlands) for the past 10-20 years.
Publication Type
Journal article.

<14>
Accession Number
20173182740
Author
Kondert, L.; Mayer, J.
Title
Reproductive medicine in Guinea pigs, chinchillas and degus. (Special Issue: Reproductive medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2017. 20(2):609-628.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Guinea pigs, chinchillas, and degus are hystricomorph rodents originating from South America. They are commonly presented as exotic pets in veterinary practice. Reviewing the anatomy and physiology of their reproductive tract helps to offer better client education about preventive medicine and helps to act faster in emergency situations. Choosing the right anesthetic protocol helps to prevent complications. This article should aid as a guideline on the most common reproductive problems of these 3 species and help in making decisions regarding the best treatment options.
Publication Type
Journal article.

<15>
Accession Number
20173186275
Author
Bhattacharjya, B. K.; Bhaumik, U.; Sharma, A. P.
Title
Fish habitat and fisheries of Brahmaputra River in Assam, India. (Special Issue: Ecology and health of major rivers of India: Biota, fisheries and management.)
Source
Aquatic Ecosystem Health & Management; 2017. 20(1/2):102-115. 41 ref.
Publisher
Taylor & Francis
Location of Publisher
Philadelphia
Country of Publication
USA

Abstract
River Brahmaputra is a trans-boundary major river flowing through the northeastern state of Assam, India and is the lifeline of its natural fisheries. In the present article, we discuss eco-hydrobiology (including sediment quality and energy flow) of River Brahmaputra and its important tributaries in the state of Assam, India based on extensive synoptic studies conducted from April 1996 to March 1998, duly collated with past and present studies. Salient aspects of fisheries of the river system in the state (ichthyofauna, biogeography, conservation status, migratory and exotic fish species, trends in fish yield and species composition, fishing crafts and gear) are discussed in light of past and present studies conducted by the Indian Council of Agricultural Research-Central Indian Fisheries Research Institute and others. Fisheries of floodplain wetlands (beels) located in the Brahmaputra valley in the state and their interaction with the river system are also discussed.
Publication Type
Journal article.

<16>
Accession Number
20163034115
Author
Overman, M. C.
Title
A review of ferret toxicoses. (Special Issue: Clinical toxicology.)
Source
Journal of Exotic Pet Medicine; 2015. 24(4):398-402. 22 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Within the past 20 years, ferrets have steadily gained popularity as a household pet. Owing to their small size, ability to climb, and explore under furniture and behind appliances, curious ferrets are often exposed to misplaced items. This ability to search secluded areas within the house provides opportunities for the animal to interface with toxic substances, of which the owner may be totally unaware. Owing to their low body weight, ferrets are at a higher risk of toxicosis since they obtain higher doses of the toxin on a mg/kg basis. Improperly applied flea and tick products, labeled for other pets, may also result in an adverse drug reaction.
Publication Type
Journal article.

<17>
Accession Number
20163160486
Author
McLaughlin, A.; Strunk, A.
Title
Common emergencies in small rodents, hedgehogs, and sugar gliders. (Special Issue: Emergency and critical care.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2016. 19(2):465-499.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher

Philadelphia
Country of Publication
USA
Abstract
Small exotic mammal pets such as rats, mice, hamsters, gerbils, degus, hedgehogs, and sugar gliders are becoming more popular. Because these animals are prone to a variety of health problems, and require specialized husbandry care to remain healthy, they may present to emergency hospitals in critical condition. This article provides a basic overview of common emergency presentations of these species.
Publication Type
Journal article.

<18>
Accession Number
20163160484
Author
DeCubellis, J.
Title
Common emergencies in rabbits, guinea pigs, and chinchillas. (Special Issue: Emergency and critical care.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2016. 19(2):411-429.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Rabbits, guinea pigs, and chinchillas are some of the more common exotic pets seen in emergency clinics. They frequently present with acute illnesses that are the result of several chronic conditions, most related to inadequate diet and husbandry. This article reviews the diagnosis and treatment of some of the more common acute illnesses. It also discusses the predisposing factors that culminate in acute presentations, so that emergency providers can recognize and be mindful of underlying causes of disease before treatment of acute illnesses.
Publication Type
Journal article.

<20>
Accession Number
20163172683
Author
Williams, R.; Pernetta, A. P.; Horrocks, J. A.
Title
Outcompeted by an invader? Interference and exploitative competition between tropical house gecko (Hemidactylus mabouia) and Barbados leaf-toed gecko (Phyllodactylus pulcher) for diurnal refuges in anthropogenic coastal habitats. (Special Section: Biological invasion.)
Source
Integrative Zoology; 2016. 11(3):229-238. 48 ref.
Publisher
Wiley-Blackwell
Location of Publisher
Melbourne

Country of Publication
Australia
Abstract
House geckos in the genus Hemidactylus are highly successful colonizers of regions beyond their native range, with colonization often resulting in displacement of native gecko species through competitive interactions for daytime refuge (crevices) and prey resources. We report on data collected from nighttime surveys undertaken in April-May 2014 on Barbados, West Indies, that focused on the distribution and abundance of the endemic Barbados leaf-toed gecko (Phyllodactylus pulcher) and the introduced tropical house gecko (Hemidactylus mabouia) along unlit coastal walls and among boulders in the grounds of a hotel resort. In contrast to patterns of displacement of native species by H. mabouia seen elsewhere, P. pulcher was more abundant than H. mabouia on coastal walls, whereas the latter was found in greater numbers using boulders at this site. Walls and boulders differed with regard to availability of diurnal refugia suitable for geckos, with the walls having high frequency of small crevices with openings <20 mm, and boulders offering very little cover other than the underside of the boulder itself. To investigate whether this niche separation was a result of differences in diurnal refuge use between the species, we conducted experimental trials in which geckos were allowed to select between refugia with different characteristics. Both species selected for narrower and warmer refugia, and refugia that had been previously occupied by the other species. These shared preferences for refugia type suggest that other factors underlie the niche separation observed in the field. In supporting high densities of P. pulcher, coastal walls could offer important secondary habitat by augmenting the natural cliff side habitat of this endemic gecko, a finding that could be exploited for the conservation of this candidate species for Critically Endangered classification.
Publication Type
Journal article.

<21>
Accession Number
20163172681
Title
Special Section: Biological invasion. (Special Section: Biological invasion.)
Source
Integrative Zoology; 2016. 11(3):214-238.
Publisher
Wiley-Blackwell
Location of Publisher
Melbourne
Country of Publication
Australia
Abstract
This issue contains topics on the taxonomy of invasive Callosciurus spp. in Europe and the interference and exploitative competition between tropical house gecko (Hemidactylus mabouia) and Barbados leaf-toed gecko (Phyllodactylus pulcher) for diurnal refuges in anthropogenic coastal habitats in the West Indies.
Publication Type
Journal issue.

<22>
Accession Number
20163316366
Author
Lennox, A. M.; Miwa, Y.
Title
Anatomy and disorders of the oral cavity of miscellaneous exotic companion mammals. (Special Issue: Disorders of the oral cavity.)

Source
Veterinary Clinics of North America: Exotic Animal Practice; 2016. 19(3):929-945.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Unusual mammalian species such as the hedgehog, sugar glider, and miniature pig are encountered with increasing frequency in exotic companion medicine. Disease of the oral cavity can occur in any species; although occasionally encountered in exotic mammalian species, it is rarely described in the literature. Anatomy and dentition vary significantly; diagnosis and treatment are often extrapolated from that known in other species. The best-documented disease of the oral cavity in this group of species is oral neoplasia in the hedgehog.
Publication Type
Journal article.

<23>
Accession Number
20163316365
Author
Johnson-Delaney, C. A.
Title
Anatomy and disorders of the oral cavity of ferrets and other exotic companion carnivores. (Special Issue: Disorders of the oral cavity.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2016. 19(3):901-928.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Exotic companion carnivores such as ferrets, skunks, fennec foxes, coatimundis, raccoons, and kinkajous presented in clinical practice share similar dental anatomy, function, and diseases. The domestic ferret serves as the representative species for this group with its anatomy, diseases, and conditions described in detail. Dog and cat guidelines for veterinary and home care seem to be relevant and applicable, including dental endodontic procedures. Annual or biannual dental examinations and prophylaxis are recommended. The most common dental and oral problems are tooth wear, plaque and calculus, teeth fractures, gingivitis and periodontitis, tooth loss, abscesses, oral ulceration, tonsillitis, and neoplasia.
Publication Type
Journal article.

<24>
Accession Number
20163316359
Author
Capello, V.
Title

Diagnostic imaging of dental disease in pet Rabbits and rodents. (Special Issue: Disorders of the oral cavity.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2016. 19(3):757-782.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Diagnostic imaging techniques are of paramount importance for dentistry and oral disorders of rabbits, rodents, and other exotic companion mammals. Aside from standard radiography, stomatoscopy is a complementary tool allowing a thorough and detailed inspection of the oral cavity. Computed tomography (CT) generates multiple 2-dimensional views and 3-dimensional reconstructions providing superior diagnostic accuracy also useful for prognosis and treatment of advanced dental disease and its related complications. MRI is a diagnostic imaging technique additional to CT used primarily to enhance soft tissues, including complex odontogenic abscesses.
Publication Type
Journal article.

<25>
Accession Number
20163316355
Author
Roberts-Sweeney, H. E.
Title
Anatomy and disorders of the oral cavity of ornamental fish. (Special Issue: Disorders of the oral cavity.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2016. 19(3):669-687.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Ornamental fish represent the largest and most diverse group of exotic animals kept as pets. The specific oral anatomy of each family or selected species has evolved to suit the natural environment, feeding behaviors, food or prey type, and location of the food/prey in the water column. The anatomy can change over the life of the animal, from fry to adult. The oral cavity of fish is susceptible to many problems including infectious and parasitic diseases, trauma, and neoplasia. Diagnosis may involve wet mount preparations of exfoliative cytology from the lesion, histopathology, and bacterial or fungal culture.
Publication Type
Journal article.

<26>
Accession Number
20153024939
Author
Symes, C. T.
Title

Founder populations and the current status of exotic parrots in South Africa. (Special Issue: Special issue on African parrots.)
Source
Ostrich; 2014. 85(3):235-244. many ref.
Publisher
NISC - Taylor & Francis
Location of Publisher
Grahamstown
Country of Publication
South Africa
Abstract
Parrots (families Psittacidae and Cacatuidae) are one of the most threatened taxa of birds, with a combination of threats to wild populations, including capture for the cage bird market, habitat modification and destruction, persecution, disease, and threats from introduced species. As a result of the group's popularity as a cage bird, and the transport of vast numbers of individuals across the globe (both legally and illegally), the establishment of populations beyond their natural ranges has likely been enhanced. This review reports on c. 30 parrot species that have been observed outside of their natural ranges in South Africa, most likely derived, and supplemented, from both intentional and unintentional releases. Of these, the Rose-ringed Parakeet Psittacula krameri and at least one Agapornis species have become established as breeding wild populations. Like other invasive species they may pose threats to local biodiversity; however, all are strongly associated with major urban centres where significant changes to natural biota have already occurred.
Publication Type
Journal article.

<27>
Accession Number
20153068905
Author
Cordova-Tapia, F.; Contreras, M.; Zambrano, L.
Title
Trophic niche overlap between native and non-native fishes. (Special Issue: Aquatic invasive species.)
Source
Hydrobiologia; 2015. 746291-301. many ref.
Publisher
Springer
Location of Publisher
Dordrecht
Country of Publication
Netherlands
Abstract
In Mexico, non-native species are established in virtually every lake and represent one of the most important factors in species diversity loss. An iconic example is Lake Patzcuaro, which used to provide one of the most abundant fisheries of native species among freshwater systems in Mexico. But in the last decades, the relative abundance of non-native species has increased together with a reduction of native species populations. In this study, we analyze the trophic niche overlap between native and non-native species by using carbon and nitrogen stable isotopes. We did not found a spatial effect between physicochemical variables and isotopic signatures. The trophic niche area showed a small overlap among native species, but a substantial overlap of native species with non-native C. carpio and O. aureus. The non-native species P. infans presented almost no trophic overlap with other species. Non-native species have a trophic niche area two times larger than natives. The trophic niche overlap between native and non-native species was higher than among natives. The narrower trophic niche area and the high overlap with non-native species may explain the decline of native species populations. Alternative but untested explanations include altered water quality stemming from pollution and indirect effects of non-natives.
Publication Type
Journal article.

<28>
Accession Number
20153088171
Author
Mancinelli, E.
Title
Neurologic examination and diagnostic testing in rabbits, ferrets, and rodents. (Special Issue: Neurology.)
Source
Journal of Exotic Pet Medicine; 2015. 24(1):52-64. 12 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Rabbits, rodents, and ferrets are accepted as patients in many veterinary practices, with their owners being dedicated to providing excellent health care for their pets. It is of the utmost importance to provide these animals the same level of care offered to more common companion mammal species (e.g., dogs and cats). Veterinarians must be knowledgeable of anatomical and physiological parameters associated with the companion exotic mammal species to appropriately treat these animals when presented for illness or to have a surgical procedure performed. This eventually results in improved medical care and ultimately a longer and healthier life. Neurologic and musculoskeletal diseases commonly affect rabbits. However, neurologic signs are rarely reported in ferrets and rodents and often appear to be a manifestation of systemic illness rather than a primary neurologic disease. The primary aim of a neurologic examination is to determine whether a neurologic problem exists and, if so, to determine its anatomical location. When considered together with the patient's history and findings of physical examination, neuroanatomical localization allows the formulation of a list of possible differential diagnoses, which then further determines the diagnostic tests that can be performed to reach a definitive disease diagnosis.
Publication Type
Journal article.

<29>
Accession Number
20153088169
Author
Meredith, A. L.; Richardson, J.
Title
Neurological diseases of rabbits and rodents. (Special Issue: Neurology.)
Source
Journal of Exotic Pet Medicine; 2015. 24(1):21-33. 49 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Clinical signs of neurological disease, such as head tilt, hind limb paresis or paralysis, seizures, and muscle weakness, are commonly encountered in pet rabbits, and in the authors' experience, less often in rodent species. Moreover, localisation of neurological lesions and establishment of a definitive diagnosis can be challenging for any of the exotic small mammal species. In many rabbit and rodent cases, distinguishing

neurological disease from musculoskeletal disease is difficult. The parasitic disease encephalitozoonosis is commonly diagnosed in pet rabbits; in both rabbits and rodents, bacterial infections are also a common underlying cause of neurological disease. Other causes of neurological diseases that adversely affect pet rabbits and rodents include toxins, trauma, metabolic and degenerative disorders, viral infections, neoplasia, and hereditary abnormalities.
Publication Type
Journal article.

<30>
Accession Number
20153154327
Author
Harris, L. M.
Title
Ferret wellness management and environmental enrichment. (Special Issue: Wellness and environmental enrichment.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2015. 18(2):233-244.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
The domestic ferret is a commonly kept companion animal. Knowledge of proper husbandry of companion ferrets and their common disease processes by veterinarians assists pet owners in providing the healthiest environment possible. Attentiveness to the environmental needs of pet ferrets results in physically and psychologically healthy animals and a positive, enriched relationship with owners.
Publication Type
Journal article.

<31>
Accession Number
20153154323
Author
Rupley, A. E.
Title
Special Issue: Wellness and environmental enrichment. (Special Issue: Wellness and environmental enrichment.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2015. 18(2):187-337.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
This special issue is a compilation of articles from various experts on exotic animals. Topics discussed are: keeping the exotic pet mentally healthy; psittacine wellness management and environmental enrichment; juvenile psittacine environmental enrichment; ferret wellness management and environmental enrichment;

small exotic companion mammal wellness management and environmental enrichment; camelid wellness; reptile wellness management; environmental enrichment for aquatic animals; and advances in exotic mammal clinical therapeutics.
Publication Type
Journal issue.

<32>
Accession Number
20153308285
Author
Proenca, L. M.
Title
Two-portal access laparoscopic ovariectomy using ligasure atlas in exotic companion mammals. (Special Issue: Endoscopy.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2015. 18(3):587-596.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Laparoscopic sterilization techniques are becoming accepted in veterinary medicine, and there has been interest in reducing the number and size of portals. Computer-controlled bipolar electrocoagulation devices facilitate sealing and dividing ovarian pedicles, reducing operative time. The 2-portal laparoscopic ovariectomy has been proved to be safe, feasible, and effective in dogs and cats, but has not yet been described in exotic companion mammals. Based on the author's experience, the 2-portal laparoscopic ovariectomy seems to be safe and feasible in rabbits, but complications such as emergency conversion to laparotomy and severe postoperative ileus have occurred in pigs.
Publication Type
Journal article.

<33>
Accession Number
20153308277
Author
Chai, N.
Title
Endoscopy in amphibians. (Special Issue: Endoscopy.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2015. 18(3):479-491.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Despite advances in exotic animal endoscopy, descriptions involving amphibians are scarce. Amphibian endoscopy shares some similarities with reptiles, especially in lizards. Selected procedures are discussed, including stomatoscopy, gastroscopy, coelioscopy, and biopsy of coelomic organs and lesions. This short

overview provides the practitioner with pragmatic advice on how to conduct safe and effective endoscopic examinations in amphibians.
Publication Type
Journal article.

<34>
Accession Number
20153308274
Author
Jekl, V.; Hauptman, K.; Knotek, Z.
Title
Video otoscopy in exotic companion mammals. (Special Issue: Endoscopy.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2015. 18(3):431-445.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Ear disease is a common disorder seen in exotic companion mammals, especially in ferrets, rabbits, and rats. This article describes patient preparation, equipment, and video otoscopy technique in exotic companion mammals. This noninvasive technique facilitates accurate diagnosis of diseases affecting the external ear canal or middle ear. Moreover, therapeutic otoscopic evaluation of the external ear facilitates foreign body removal, external ear canal flushing, intralesional drug administration, myringotomy, and middle ear cavity flushing.
Publication Type
Journal article.

<35>
Accession Number
20153308271
Author
Pignon, C.; Minh Huynh; Husnik, R.; Jekl, V.
Title
Flexible gastrointestinal endoscopy in ferrets (Mustela putorius furo). (Special Issue: Endoscopy.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2015. 18(3):369-400.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Gastrointestinal disease is a common complaint in ferrets (Mustela putorius furo). Their relatively simple and short gastrointestinal tract makes them good candidates for flexible endoscopy. However, apart from a few references in biomedical research articles, there is little information on the use of flexible endoscopy in ferrets. This review describes patient preparation, equipment, and select gastrointestinal endoscopy techniques in ferrets, including esophagoscopy, gastroscopy, duodenoscopy, percutaneous endoscopic gastrostomy, jejunoileoscopy, colonoscopy, and biopsy.

Publication Type
Journal article.

<36>
Accession Number
20153327084
Author
Zimmerman, K.; Moore, D. M.; Smith, S. A.
Title
Hematological assessment in pet guinea pigs (Cavia porcellus): blood sample collection and blood cell identification. (Special Issue: Veterinary laboratory medicine: small and exotic animals.)
Source
Clinics in Laboratory Medicine; 2015. 35(3):641-648.
Publisher
Elsevier Inc
Location of Publisher
Orlando
Country of Publication
USA
Abstract
Pet guinea pigs are presented to veterinary clinics for routine care and treatment of clinical diseases. In addition to obtaining clinical history and exam findings, diagnostic testing may be required, including hematological assessments. This article describes common blood collection methods, including venipuncture sites, the volume of blood that can be safely collected, and handling of the blood. Hematological parameters for normal guinea pigs are provided for comparison with in-house or commercial test results. A description of the morphology of guinea pig leukocytes is provided to assist in performing a differential count.
Publication Type
Journal article.

<37>
Accession Number
20153327083
Author
Lindstrom, N. M.; Moore, D. M.; Zimmerman, K.; Smith, S. A.
Title
Hematologic assessment in pet rats, mice, hamsters, and gerbils: blood sample collection and blood cell identification. (Special Issue: Veterinary laboratory medicine: small and exotic animals.)
Source
Clinics in Laboratory Medicine; 2015. 35(3):629-640.
Publisher
Elsevier Inc
Location of Publisher
Orlando
Country of Publication
USA
Abstract
Hamsters, gerbils, rats, and mice are presented to veterinary clinics and hospitals for prophylactic care and treatment of clinical signs of disease. Physical examination, history, and husbandry practice information can be supplemented greatly by assessment of hematologic parameters. As a resource for veterinarians and their technicians, this article describes the methods for collection of blood, identification of blood cells, and interpretation of the hemogram in mice, rats, gerbils, and hamsters.
Publication Type

Journal article.

<38>
Accession Number
20153327082
Author
Moore, D. M.; Zimmerman, K.; Smith, S. A.
Title
Hematological assessment in pet rabbits: blood sample collection and blood cell identification. (Special Issue: Veterinary laboratory medicine: small and exotic animals.)
Source
Clinics in Laboratory Medicine; 2015. 35(3):617-627.
Publisher
Elsevier Inc
Location of Publisher
Orlando
Country of Publication
USA
Abstract
Pet rabbits are presented to veterinary clinics for routine care and treatment of clinical diseases. In addition to obtaining clinical history, additional diagnostic testing may be required, including hematological assessments. This article describes common blood collection methods, including venipuncture sites, volume of blood that can be safely collected, and handling of the blood. Hematological parameters for normal rabbits are provided for comparison with in-house or commercial test results. A description of the morphology of rabbit leukocytes is provided to assist in performing a differential count. Differential diagnoses are provided for abnormal values identified in the hemogram.
Publication Type
Journal article.

<39>
Accession Number
20153327081
Author
Smith, S. A.; Zimmerman, K.; Moore, D. M.
Title
Hematology of the domestic ferret (Mustela putorius furo). (Special Issue: Veterinary laboratory medicine: small and exotic animals.)
Source
Clinics in Laboratory Medicine; 2015. 35(3):609-616.
Publisher
Elsevier Inc
Location of Publisher
Orlando
Country of Publication
USA
Abstract
Pet ferrets are presented to veterinary clinics for routine care and treatment of clinical diseases and female reproductive problems. In addition to obtaining clinical history, additional diagnostic testing may be required, including hematological assessments. This article describes common blood collection methods, including venipuncture sites, volume of blood that can be safely collected, and handling of the blood. Hematological parameters for normal ferrets are provided along with a description of the morphology of ferret leukocytes to assist in performing a differential count.

Publication Type
Journal article.

<40>
Accession Number
20153327072
Title
Special Issue: Veterinary laboratory medicine: small and exotic animals. (Special Issue: Veterinary laboratory medicine: small and exotic animals.)
Source
Clinics in Laboratory Medicine; 2015. 35(3):487-722.
Publisher
Elsevier Inc
Location of Publisher
Orlando
Country of Publication
USA
Abstract
This special issue discusses the renal function testing in dogs and cats; laboratory diagnostic approach to hepatobiliary disease and small intestinal disorders in small animals; interpretation and application of exocrine pancreatic testing in small animals; cardiac biomarkers in veterinary practice; use of lactate in small animal clinical practice; diagnosis of disorders of iron metabolism in dogs and cats; making sense of lymphoma diagnostics in small animal patients; haematology of domestic ferret (Mustela putorius furo), avian, reptile and fishes; haematological assessment in rabbits, rats, mice, hamsters, guineapigs and gerbils.
Publication Type
Journal issue.

<41>
Accession Number
20153386062
Author
Fehr, M.
Title
Zoonotic potential of dermatophytosis in small mammals. (Special Section: Fungal infections.)
Source
Journal of Exotic Pet Medicine; 2015. 24(3):308-316. 68 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Zoophilic dermatophytes play an important role in animal and human health. Small exotic mammals can be infected with a variety of dermatophytes that inhabit the fur, skin, nails, environment, cage, and/or soil. Humans are susceptible to these organisms; however, younger or immunocompromised individuals and people with intensive contact with pets are particularly susceptible to infection. The most important dermatophytes for small mammals are Trichophyton mentagrophytes, Trichophyton erinacei, Trichophyton quinckeanum, Arthroderma benhamiae, Arthroderma vanbreuseghemii, Microsporum gypseum, and Microsproum persicolor. Dermatophytes elicit a host inflammatory response, pruritus, which results from a cell-mediated hypersensitivity to fungal wall antigens. Erythema, excoriations, crusts, hyperkeratosis, alopecia, and secondary bacterial dermatitis are common clinical findings. In small mammals, infection can

be self-limiting and serious consequences are relatively rare. A definitive diagnosis is primarily achieved through external physical examination, Wood's lamp examination, direct microscopy of tape preparations and skin scrapings, and microscopic visualization of conidia after culture. Effective therapy for dermatophyte infection includes topical application of appropriate antifungal drops, sprays or spot-on products, bathing (e.g., enilconazole, clotrimazole, and miconazole), and parenteral antifungals (e.g., itraconazole and griseofulvin). To prevent reoccurrence or new infections, appropriate veterinary examination and quarantine of every new animal and appropriate treatment of affected small mammals and their environments are advised. Veterinarians should also inform local health authorities, pet shop employees, their staff, and especially hedgehog handlers about dermatophyte infection risks.
Publication Type
Journal article.

<42>
Accession Number
20153386058
Author
Schmidt, V.
Title
Fungal infections in reptiles - an emerging problem. (Special Section: Fungal infections.)
Source
Journal of Exotic Pet Medicine; 2015. 24(3):267-275. 60 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Dermatomycoses as well as disseminated systemic mycoses are caused by emerging obligate pathogenic fungi of the families Onygenaceae and Clavicipitaceae in captive as well as in free-living reptiles. Isolation and differentiation of fungal agents and evaluation of their pathogenicity in diseased reptiles using histopathological examination are necessary to determine the pathogenicity of a fungal isolate in the disease process. Fungi formerly known as Chrysosporium anamorph of Nannizziopsis vriesii have recently been reassigned to the family Onygenaceae, order Onygenales (Eurotiomycetidae, Eurotiomycetes, and Ascomycota), based on phylogenetic studies. To date, 9 different reptile pathogenic species are known from this family, grouped in 3 phylogenetic lineages. The most relevant are Nannizziopsis guarroi affecting inland bearded dragons (Pogona viticeps) and green iguanas (Iguana iguana), as well as Ophidiomyces ophiodiicola in free-living snakes, which cause deep fungal dermatitis. Treatment with voriconazole is possible in bearded dragons and girdled lizards (Cordylus giganteus). Other obligate pathogenic fungi belong to the family Clavicipitaceae, which causes granulomatous glossitis, pharyngitis, and dermatitis, as well as disseminated visceral mycosis, in various lizards, tortoises, turtles, and crocodilians. No reports exist about successful treatments against fungal pathogens in the family Clavicipitaceae. Also, voriconoazole should be used carefully in chameleons, as it does not seem to be well tolerated in these species.
Publication Type
Journal article.

<43>
Accession Number
20153405184
Author
Russell, D. J.; Balazs, G. H.
Title

Increased use of non-native algae species in the diet of the Green Turtle (Chelonia mydas) in a primary pasture ecosystem in Hawaii. (Special Issue: Marine invasive species: management of ballast water and other vectors.)
Source
Aquatic Ecosystem Health & Management; 2015. 18(3):342-346. 13 ref.
Publisher
Taylor & Francis
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
The Green Turtle, Chelonia mydas, has modified its feeding behavior over the past 36 years to include the increasing abundance of non-native algae growing in the greater Kaneohe Bay area of Oahu, Hawaii. Changes in diet of the Turtles are correlated with an increase in abundance of non-native algae. Turtles are eating 135 species of marine vegetation including the following seven non-native species: Acanthophora spicifera, Hypnea musciformis, Gracilaria salicornia, Eucheuma denticulatum, Gracilaria tikvahiae, Kappaphycus striatum and Kappaphycus alvarezii. Non-native algae now represent 0.64 proportion of the Turtle diet. The present study for the additional 8 years 2005-2012, shows the utilization of non-native species for food has increased 24% since the last study that included 28 years 1976-2005. Average time for the Turtles to make the shift to non-native species is 10-12 years for the more invasive species and 20-30 years for the slower growing species. During this same time period the numbers of C. mydas, body size, and growth rates have also increased, partly due to the increased abundance of the additional non-native food items. This study verifies that the trend of Turtles eating higher amounts of non-native algae in Kaneohe Bay is now stronger than first reported in 2009.
Publication Type
Journal article.

<44>
Accession Number
20153420009
Author
Diehl, K. A.; McKinnon, J. A.
Title
Eye removal surgeries in exotic pets. (Special Issue: Soft tissue surgery.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2016. 19(1):245-267.
Publisher
Saunders, An Imprint of Elsevier
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
This article covers considerations and techniques of eye removal surgeries in exotic pets. After issues including surgical indications, anesthesia, patient preparation, and instrumentation are explored, surgical techniques are described. Enucleation/exenteration and modified evisceration are discussed, with species-specific nuances of small mammals, birds, reptiles, snakes, amphibians, and fish highlighted.
Publication Type
Journal article.

<45>

Accession Number
20153429341
Author
Mihalca, A. D.
Title
Ticks imported to Europe with exotic reptiles. (Special Issue: Spread of parasites with animal movements.)
Source
Veterinary Parasitology; 2015. 213(1):67-71. 40 ref.
Publisher
Elsevier B. V.
Location of Publisher
Amsterdam
Country of Publication
Netherlands
Abstract
It is known that traded exotic animals carry with them an immense number of associated symbionts, including parasites. Reptiles are no exception. Most of the imported reptiles originate from tropical countries and their possibility to carry potentially dangerous pathogens is high. According to CITES, Europe is currently the main reptile importer in the world. Despite this, there is no review or analysis available for the risk related to the importation of tick-borne diseases with traded reptile to the EU. The main aim of the manuscript is to provide a review on the available literature on ticks introduced to and exchanged between European countries via the live reptile trade. So far, the published reports of ticks imported on reptiles are limited to few European countries: Italy, Poland, Spain, Netherlands, Belgium, Slovenia and UK. The following species have been reported: Hyalomma aegyptium, Amblyomma dissimile, Amblyomma exornatum, Amblyomma flavomaculatum, Amblyomma fuscolineatum, Amblyomma latum, Amblyomma quadricavum, Amblyomma marmoreum, Amblyomma nuttalli, Amblyomma sparsum, Amblyomma sphenodonti, Amblyomma transversale and Amblyomma varanense. The majority of species are of African origin, followed by American and Asian species. All groups of reptiles (chelonians, snakes, lizards, crocodiles, tuataras) were involved. However, it seems that certain groups (i.e. tortoises of genus Testudo, monitor lizards of genus Varanus, snakes of genus Python) are more important as host for imported ticks, but this may be related to higher levels of international trade. Even fewer are the reports of tick-borne pathogens associated with imported reptile ticks. Despite the diversity of tick species reported on imported reptiles, the situations of truly invasive species are atypical and are limited in natural environments to maximum two cases where H. aegyptium was involved. Otherwise, the risk associated with reptile trade for introduction of invasive tick to Europe is low. Nevertheless, veterinary control is still to be reinforced for collecting more data.
Publication Type
Journal article.

<46>
Accession Number
20133424414
Author
Hoppes, S.; Heatley, J. J.; Guo, J. H.; Turner, D.; Shivaprasad, H. L.; Tizard, I.
Title
Meloxicam treatment in cockatiels (Nymphicus hollandicus) infected with avian bornavirus. (Special Issue: Advanced clinical techniques.)
Source
Journal of Exotic Pet Medicine; 2013. 22(3):275-279. 16 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract

This study was designed to investigate the effectiveness of meloxicam in the treatment of proventricular dilatation disease induced by challenge with avian bornavirus (ABV), strain M24. Three groups of 4 cockatiels were employed. Group 1 was challenged with ABV alone, group 2 was challenged with ABV and 20 days later began daily oral meloxicam treatment, and group 3 received daily oral meloxicam alone. All birds in groups 1 and 3 remained in apparent good health and maintained their weight until being euthanized on day 150 after challenge (group 1) or day 130 of treatment (group 3). In contrast, group 2 birds died or were euthanized on or before day 98 because of severe weight loss and depression. Necropsy and histopathology results indicated that all birds in group 2 had pathologic evidence of proventricular dilatation disease. ABV was detected by reverse transcriptase polymerase chain reaction testing in all the major organs of the group 2 birds. The proventriculus was enlarged in 2 birds in group 1, and 75% of the birds in this group had ABV detectable in all their major organs. No significant lesions were observed in group 3 birds.
Publication Type
Journal article.

<47>
Accession Number
20133424412
Author
Needle, D.; McKnight, C. A.; Kiupel, M.
Title
Chondroblastic osteosarcoma in two related spiny-tailed monitor lizards (Varanus acanthurus). (Special Issue: Advanced clinical techniques.)
Source
Journal of Exotic Pet Medicine; 2013. 22(3):265-269. 22 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Two male spiny-tailed monitor lizard (Varanus acanthurus) broodmates were diagnosed with chondroblastic osteosarcomas associated with the pelvic girdle. One lizard was 6 months old and the other 5 months old at the time of diagnosis. Grossly, the tumors appeared as large, firm, multilobulated masses that were white on cut surface and firmly adhered to the underlying bone. Histologically, both tumors were characterized by proliferation of neoplastic spindloid to stellate cells that encompassed the vertebrae and invaded into the vertebral and pelvic bones. Both osteoid production and multifocal chondrous differentiation were observed within neoplastic masses. Retinoblastoma 1 was absent in neoplastic cells. Even though osseous neoplasms are rare amongst reptiles, Varanus spp. may have a genetic predilection for developing chondroblastic osteosarcoma.
Publication Type
Journal article.

<48>
Accession Number
20133424411
Author
Smith, M.; Dodd, J. R.; Hobson, H. P.; Hoppes, S.
Title
Clinical techniques: surgical removal of elodontomas in the black-tailed prairie dog (Cynomys ludovicianus) and eastern fox squirrel (Sciurus niger). (Special Issue: Advanced clinical techniques.)

Source
Journal of Exotic Pet Medicine; 2013. 22(3):258-264. 11 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Acquired dental disease and the formation of elodontomas are often diagnosed in sciurids. The formation of the elodontoma may be preceded by a traumatic tooth injury or other initiating factors. The degree of disease severity varies based on individual presentation and the time of detection. Maxillary elodontomas in sciurid species cause airway obstruction that can prove fatal for these obligate nasal-breathing animals. A thorough understanding of rodent dental anatomy and a complete diagnostic workup are required for diagnosis, prognosis, and surgical planning of elodontoma presentations. This article highlights 2 successful surgical techniques for the removal of the maxillary incisors in sciurid patients with almost total occlusion of the nasal passage.
Publication Type
Journal article.

<49>
Accession Number
20133424410
Author
Kusmierczyk, J.; Wall, C. R.; Hoppes, S.; Budke, C. M.; Spaulding, K. A.
Title
Comparison of computed tomographic images of birds obtained with sedation vs general anesthesia. (Special Issue: Advanced clinical techniques.)
Source
Journal of Exotic Pet Medicine; 2013. 22(3):251-257. 25 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Computed tomography (CT) is an increasingly available and valuable imaging modality for the diagnosis of companion avian pets. Previously, CT studies of birds required general anesthesia with inhalant anesthetics. Owing to the risks associated with general anesthesia, the authors of this article investigated the effect of sedation on birds during a CT examination. In this study, 10 psittacine birds were imaged using a 40-slice helical CT scanner. Birds were sedated with midazolam and butorphanol and placed in a positioning device. Following the initial study, birds were removed from the device and placed under general anesthesia with isoflurane. A second study was then performed. Two radiologists, blinded to the identity of the birds and partially blinded to the conditions of the study, reviewed the images. Studies were evaluated using a questionnaire consisting of 18 questions. Each question was scored on a Likert scale. A Wilcoxon signed rank test compared scores of sedated and anesthetized birds. A significant difference (P=0.05) between sedated and anesthetized studies was found for 2 of 18 (11.1%) questions for radiologist 1 and 1 of 18 (5.5%) questions for radiologist 2, with differences identified in the scleral ossicles and the femoral heads. Interrater agreement for all questions using a linearly weighted kappa was 0.334 and 0.311 for sedated and anesthetized birds, respectively, indicating fair agreement. The interrater agreement, excluding the head and musculoskeletal system, was 0.381 for sedated animals, indicating fair agreement, and 0.404 for anesthetized birds, indicating moderate agreement. Based on our results, performing CT studies in birds with sedation is a viable alternative to studies performed under general anesthesia.
Publication Type
Journal article.

<50>
Accession Number
20143057074
Author
Petzinger, C.; Bauer, J. E.
Title
Dietary considerations for atherosclerosis in common companion avian species. (Special Issue: Atherosclerosis and vascular medicine.)
Source
Journal of Exotic Pet Medicine; 2013. 22(4):358-365. 58 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Atherosclerosis is a disease that occurs in many avian species commonly presented to veterinarians. Many risk factors for atherosclerosis are well defined in mammals but not in avian species. Dietary nutrients can play a large role in reducing the severity and prevalence of atherosclerosis in both avian and mammalian species. Information on the effect of dietary nutrients on atherosclerosis in Falconiformes and other birds of prey is extremely limited as no studies were identified by the authors. Dietary cholesterol can be fed to induce the development of atherosclerosis in avian species that consume nonanimal protein. Diets containing high levels of omega-3 fatty acids reduce the prevalence and severity of atherosclerosis, with fish oil being more effective than alpha -linolenic acid. The presence of dietary cholesterol results in higher levels of dietary protein, increasing the prevalence and severity of atherosclerosis, but if dietary cholesterol is absent, there is a subsequent decrease in atherosclerosis. Pectin in the diet decreased the occurrence of atherosclerosis but also decreased the availability of nutrients owing to faster ingesta passage rates. Feed restriction has also been found to decrease the prevalence of atherosclerosis in birds. It should be noted that many studies have found nutrient interaction effects on the development of atherosclerosis, with some being "neutralizing" or negative, so caution should be observed when manipulating avian diets. The objective of this article is to review the effects of dietary nutrients on atherosclerosis.
Publication Type
Journal article.

<51>
Accession Number
20143057073
Author
Jones, M. P.
Title
Vascular diseases in birds of prey. (Special Issue: Atherosclerosis and vascular medicine.)
Source
Journal of Exotic Pet Medicine; 2013. 22(4):348-357. 116 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract

In birds of prey, vascular disease can be caused by a number of infectious or noninfectious agents and is in all likelihood underdiagnosed. This review attempts to provide a discussion of the available literature regarding vascular diseases in raptors by describing a number of conditions or etiological agents (e.g., atherosclerosis, aneurysms, bacterial and septicemic conditions, thromboembolic disease, and viral, fungal, parasitic, and miscellaneous diseases) and the vascular pathology that may occur with each.
Publication Type
Journal article.

<52>
Accession Number
20143057072
Author
Beaufrere, H.
Title
Avian atherosclerosis: parrots and beyond. (Special Issue: Atherosclerosis and vascular medicine.)
Source
Journal of Exotic Pet Medicine; 2013. 22(4):336-347. 79 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Atherosclerotic lesions are prevalent in companion psittacine species. Parrots account for much of the veterinary scientific information on avian atherosclerosis, but the lesions have been described in virtually all avian orders. This review presents a synthesis of the epidemiologic, clinical, diagnostic, and therapeutic information known in psittaciformes, at this time, which may help in the veterinary management of atherosclerotic diseases. The article further expands on nondomestic avian species for which information is restricted to pathologic and prevalence studies. A thorough knowledge of atherosclerosis is of the upmost importance for avian clinicians as the disease is common, affects most species of birds, and seems to be associated with captive lifestyles characterized by decreased activity and nonnative diets. Therefore, avian veterinarians are expected to be largely exposed to this chronic medical condition through patient presentation and should be prepared to properly manage this disease.
Publication Type
Journal article.

<53>
Accession Number
20143128321
Author
Mans, C.
Title
Intrathecal drug administration in turtles and tortoises. (Special Issue: Advances in clinical therapeutics.)
Source
Journal of Exotic Pet Medicine; 2014. 23(1):67-70. 9 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA

Abstract
Intrathecal (subdural) administration of anesthetic and analgesic drugs in turtles and tortoises is a novel technique for the induction of spinal anesthesia and analgesia. Possible indications for spinal anesthesia include surgical procedures of the tail, phallus, cloaca, and hind limbs. Intrathecal injections are performed at the level of the coccygeal vertebrae. In red-eared sliders the intrathecal administration of lidocaine (2% preservative free, 4 mg/kg) and bupivacaine (0.5% preservative free, 1 mg/kg) provides regional anesthesia of the tail, cloaca, and hind limbs for about 1 and 2 hours, respectively. The intrathecal administration of morphine provides regional analgesia for up to 48 hours. Strict aseptic techniques should be used to avoid iatrogenic complications, and only preservative-free drugs should be injected into the intrathecal space so that spinal toxicity and secondary neurologic complications are avoided.
Publication Type
Journal article.

<54>
Accession Number
20143128317
Author
Gibbons, P. M.
Title
Advances in reptile clinical therapeutics. (Special Issue: Advances in clinical therapeutics.)
Source
Journal of Exotic Pet Medicine; 2014. 23(1):21-38. 122 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
The standard of today's reptile practice calls on clinicians to use an ever-increasing array of diagnostic tools to gather information and obtain a definitive diagnosis. Few, if any, pathognomonic signs exist for reptile diseases, and for most clinical syndromes there is a lack of information regarding pathophysiology for one to define standard therapeutic protocols based solely on clinical signs without objective diagnostic information. For example, in the relatively distant past, clinicians treating reptile patients would routinely administer parenteral calcium to green iguanas (Iguana iguana) with the primary presenting clinical sign of muscle tremors. Today, veterinarians who treat reptiles recognize that the risk of soft tissue mineralization and permanent damage to arteries, renal tubules, and other tissues usually outweighs the potential short-term benefit of calcium therapy. Before calcium therapy is initiated, it is best to know the patient's ionized calcium concentration to reduce the risk of potential adverse therapeutic side effects. A problem-oriented diagnostic approach directed toward minimizing risk and maximizing therapeutic benefit is now the standard of reptile practice.
Publication Type
Journal article.

<55>
Accession Number
20143162737
Author
Heidenreich, B.
Title
Diet and its role in the behavioral health and training of exotic species. (Special Issue: Gastroenterology.)
Source

Veterinary Clinics of North America: Exotic Animal Practice; 2014. 17(2):235-247.
Publisher
Elsevier, Inc.
Location of Publisher
New York
Country of Publication
USA
Abstract
Food plays an important part in companion animal health, and also plays a significant role in influencing animal behavior. Avian and small mammal species show general trends in food preferences that can be used to reinforce desired behaviors. Motivation for food can be increased by various strategies. Nonfood reinforcers also offer additional options for reinforcing behaviors when food is of little value to an animal. Transitioning to less rich, healthier diets can help prevent reproductive hormone amplification. This article explores how delivering food is an opportunity to influence behavior in addition to providing nourishment.
Publication Type
Journal article.

<56>
Accession Number
20143162733
Author
Ritzman, T. K.
Title
Diagnosis and clinical management of gastrointestinal conditions in exotic companion mammals (rabbits, guinea pigs, and chinchillas). (Special Issue: Gastroenterology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2014. 17(2):179-194.
Publisher
Elsevier, Inc.
Location of Publisher
New York
Country of Publication
USA
Abstract
Gastrointestinal disorders are common in exotic mammals such as rabbits, guinea pigs and chinchillas. Presenting clinical signs of gastrointestinal disease can vary widely. Small herbivores require specific dietary support and therapeutic treatments. Ileus is a common clinical condition and can be a primary or secondary disease. Common forms of treatment for ileus include fluid therapy, pain relief, nutritional support, and prokinetic therapy. The prognosis of the exotic mammal patient with gastrointestinal disease depends on the timing of the diagnosis and initiation of treatment. Surgical conditions such as gastrointestinal obstruction can have a good outcome if diagnosed early.
Publication Type
Journal article.

<57>
Accession Number
20143162732
Author
Kohles, M.
Title
Gastrointestinal anatomy and physiology of select exotic companion mammals. (Special Issue: Gastroenterology.)

Source
Veterinary Clinics of North America: Exotic Animal Practice; 2014. 17(2):165-178.
Publisher
Elsevier, Inc.
Location of Publisher
New York
Country of Publication
USA
Abstract
The anatomy and gastrointestinal physiology of rabbits, guinea pigs, and chinchillas are different from those of other exotic companion mammals. Rabbits, guinea pigs, and chinchillas are all concentrate selectors, hindgut fermenters, and coprophagic. They are designed to intake large quantities of high-fibrous, low-energy-density foods. They use unique colonic separation mechanisms and have open-rooted, constantly growing dentition. Gastrointestinal disease, often secondary to diet or environmental factors, is common in these species.
Publication Type
Journal article.

<58>
Accession Number
20143162729
Author
Ritzman, T. K.
Title
Special Issue: Gastroenterology. (Special Issue: Gastroenterology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2014. 17(2):ix-x + 123-297.
Publisher
Elsevier, Inc.
Location of Publisher
New York
Country of Publication
USA
Abstract
This issue is comprised of papers focusing on gastrointestinal anatomy, physiology and disorders of fish, exotic companion mammals, raptors and reptiles. Diagnosis and management of digestive disorders, including those caused by infectious agents and parasites, are also presented. Topics discussed include veterinary guide to fish gastrointestinal tract, pathology of the exotic companion mammal gastrointestinal system, gastrointestinal anatomy and physiology of exotic companion mammals (rabbits, guineapigs and chinchillas), diagnosis and clinical management of gastrointestinal conditions in exotic companion mammals, liver lobe torsion in pet rabbits (clinical consequences, diagnosis and treatment), diagnosis and management of Macrorhabdus ornithogaster in avian patients, raptor gastroenterology, diet and its role in the behavioural health and training of exotic species, providing nutritional support to reptile patients and considerations and conditions involving protozoal inhabitation of the reptilian gastrointestinal tract.
Publication Type
Journal issue.

<59>
Accession Number
20143180617
Author
Menchetti, M.; Mori, E.

Title
Worldwide impact of alien parrots (Aves Psittaciformes) on native biodiversity and environment: a review. (Special Issue: Biology of invasive species.)
Source
Ethology Ecology & Evolution; 2014. 26(2/3):172-194. many ref.
Publisher
Taylor and Francis
Location of Publisher
Abingdon
Country of Publication
UK
Abstract
More than 16% of parrot species (Aves Psittaciformes) of the world have currently established at least one breeding population outside their natural distribution ranges. Though including the most introduced bird species all over the world, their interactions with native biodiversity and environments are still poorly known. In this paper, we summarize current knowledge about impacts of introduced Psittaciformes and we identify possible gaps to be filled with future research. Breeding site requirements of alien parrots, e.g. trunk cavities, indicate potential routes of direct and indirect competition with native hole-nesting bird species. Interactions with arboreal rodents, bats and insects are poorly documented, but appear to be limited. Psittaciformes potentially affect economy and human wellness, being responsible for damage to crops and to electrical infrastructures. Association with noise pollution has also been suggested, as many alien populations breed in urban parks or close to human settlements. Psittaciformes are potential reservoirs of Chlamydophila psittaci, the etiological agent of human psittacosis, and other diseases transmittable to humans and wildlife. Less is known about impact on native flora as well as on ecosystem functions. Predictive research and information on ecosystem recovery after parrot removal are scarce too, as eradication programs are often hampered by the emotional affiliation linked to these birds.
Publication Type
Journal article.

<60>
Accession Number
20143253084
Author
Schuppli, C. A.; Fraser, D.; Bacon, H. J.
Title
Welfare of non-traditional pets. (Special Issue: Animal welfare: focusing on the future.)
Source
Revue Scientifique et Technique - Office International des Epizooties; 2014. 33(1):221-231. 72 ref.
Publisher
Office International des Epizooties
Location of Publisher
Paris
Country of Publication
France
Abstract
The keeping of non-traditional or 'exotic' pets has been growing in popularity worldwide. In addition to the typical welfare challenges of keeping more traditional pet species like dogs and cats, ensuring the welfare of non-traditional pets is complicated by factors such as lack of knowledge, difficulties meeting requirements in the home and where and how animals are obtained. This paper uses examples of different species to highlight three major welfare concerns: ensuring that pets under our care (i) function well biologically, (ii) are free from negative psychological states and able to experience normal pleasures, and (iii) lead reasonably natural lives. The keeping of non-traditional pets also raises ethical concerns about whether the animal poses any danger to others (e.g. transmission of zoonotic diseases) and whether the animal might cause environmental damage (e.g. invading non-native habitats when released). The authors used these considerations to create a checklist, which identifies and organises the various concerns that may arise over keeping non-traditional species as pets. An inability to address these concerns raises questions about how

to mitigate them or even whether or not certain species should be kept as pets at all. Thus, the authors propose five categories, which range from relatively unproblematic pet species to species whose keeping poses unacceptable risks to the animals, to humans, or to the environment. This approach to the evaluation and categorisation of species could provide a constructive basis for advocacy and regulatory actions.
Publication Type
Journal article.

<61>
Accession Number
20143309782
Author
Corcoran, M.; Roberts-Sweeney, H.
Title
Aquatic animal nutrition for the exotic animal practitioner. (Special Issue: Nutrition.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2014. 17(3):333-346.
Publisher
Elsevier, Inc.
Location of Publisher
New York
Country of Publication
USA
Abstract
Fish are the most popular pets in the United States based on numbers and high-quality medical care is coming to be expected by owners. Increasing numbers of veterinarians are responding to this need and providing veterinary care for aquatic animals. Part of good medical care for exotic animals is advice on husbandry, including nutrition. However, there are numerous missing areas of research for the nutritional needs of many ornamental fish species. What is known for food species can be combined with what is known for ornamental species to give nutritional advice to owners to maximize health in these animals.
Publication Type
Journal article.

<62>
Accession Number
20143309781
Author
Mayer, J.
Title
Special Issue: Nutrition. (Special Issue: Nutrition.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2014. 17(3):333-525.
Publisher
Elsevier, Inc.
Location of Publisher
New York
Country of Publication
USA
Abstract
This issue presents papers that focus on updates regarding exotic (pets), aquatic, avian, marsupial, ferret, rodents, reptiles, and rabbit nutrition. Topics regarding some nutritonal disorders in captive reptiles and nutritive values of common feeder insects and feed supplements are included.
Publication Type

Journal issue.

<63>
Accession Number
20143331692
Author
Jayson, S. L.; Williams, D. L.; Wood, J. L. N.
Title
Prevalence and risk factors of feather plucking in African grey parrots (Psittacus erithacus erithacus and Psittacus erithacus timneh) and cockatoos (Cacatua spp.). (Special Issue: Welfare issues concerning exotic pet medicine.)
Source
Journal of Exotic Pet Medicine; 2014. 23(3):250-257. 29 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Feather plucking, or the removal by a parrot of its own feathers, is thought to be one of the most common behaviour presentations in veterinary practices that treat avian patients. However, its aetiology is poorly understood. The aims of this study were to estimate the prevalence of feather plucking within the population of African grey parrots (Psittacus erithacus erithacus and Psittacus erithacus timneh) and cockatoos (Cacatua spp.) registered with 9 veterinary practices in the United Kingdom (UK) and to explore the association between frequently hypothesised risk factors and feather plucking in these species. A questionnaire was sent to the owners of 400 African grey parrots and 310 cockatoos registered with 9 UK veterinary practices. Returned questionnaires from 137 African grey parrots and 92 cockatoos were analysed, of which 39.4% of African grey parrots and 42.4% of cockatoos had exhibited feather-plucking behaviour at some point in their lifetime. Multivariable logistic regression modelling demonstrated that increasing hours of sleep and length of ownership were significantly associated ($P<0.05$) with feather plucking in African grey parrots. Pet shop origin, cage location against >=1 wall and >=1 vacation taken by owners each year were significantly associated ($P<0.05$) with feather plucking in cockatoos. The high prevalence of feather plucking in these commonly kept pets highlights this problem as a welfare concern, whereas the risk factor analysis challenges many frequently cited hypotheses regarding its aetiology. Further research is required to explore whether there is a causal relationship between the significant risk factors identified in this study and feather-plucking behaviour.
Publication Type
Journal article.

<64>
Accession Number
20143331689
Author
Rose, M. P.; Williams, D. L.
Title
Neurological dysfunction in a ball python (Python regius) colour morph and implications for welfare. (Special Issue: Welfare issues concerning exotic pet medicine.)
Source
Journal of Exotic Pet Medicine; 2014. 23(3):234-239. 21 ref.
Publisher
Elsevier

Location of Publisher
New York
Country of Publication
USA
Abstract
There is widespread and growing public and professional awareness of genetic disorders associated with artificial breeding selection, and their implications on the health and welfare of companion animals. Despite increased captive breeding and the popularity of atypical colour/pattern variants, little research has been conducted, to date, into genetic variants of reptiles relative to common domestic animals (e.g., dogs and cats). This article aims to raise awareness in the animal welfare science community of the potential for welfare problems in genetic variant reptiles and to stimulate further research in this field. A survey of expert opinion was used to establish a description of a heritable disorder, the "wobble syndrome," associated with a widely propagated phenotype, the "spider" morph of the ball python (Python regius), a common "pet" snake species. This information was used to provide an assessment of animal welfare effects of the wobble syndrome condition.
Publication Type
Journal article.

<65>
Accession Number
20143331688
Author
Speer, B.
Title
Normal and abnormal parrot behavior. (Special Issue: Welfare issues concerning exotic pet medicine.)
Source
Journal of Exotic Pet Medicine; 2014. 23(3):230-233. 3 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Behavior and behavior-associated issues are an important part of psittacine medicine. However, many veterinarians have an approach to parrots from the basics of handling and restraint to their assessment of behavioral issues (e.g., feather plucking), that fails to take into account the importance of understanding a bird's natural behavior in the wild, and how these actions can be adapted to optimize interactions between the bird and their human owners. Understanding how to influence parrot behavior by positive reinforcement rather than punishment is key to improving the welfare of these captive birds and their owners.
Publication Type
Journal article.

<66>
Accession Number
20143412552
Author
Lennox, A. M.
Title
Safe sedation and immobilization of unusual exotic species encountered in practice. (Special Issue: Unusual exotic pets.)
Source

Journal of Exotic Pet Medicine; 2014. 23(4):363-368. 6 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Safe handling techniques for traditional exotic companion mammals (e.g., ferrets, rabbits, and rodents) have been well described. However, some uncommon species, including various wild animals maintained as pets, should not be manually restrained because of the nature of the animal and the potential for injury to both the pet and the handler. Sedation and immobilization techniques are useful to enhance safety and to facilitate diagnostic and treatment procedures. Sedatives are best administered to these animals with the aid of a squeeze cage.
Publication Type
Journal article.

<67>
Accession Number
20143412551
Author
Wissman, M. A.
Title
Husbandry and medical care of callitrichids. (Special Issue: Unusual exotic pets.)
Source
Journal of Exotic Pet Medicine; 2014. 23(4):347-362. 19 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Callitrichids, marmosets and tamarins are small Central and South American nonhuman primates. All are considered threatened in the wild and many are on the endangered species list (Convention on International Trade in Endangered Species of Wild Fauna and Flora: Appendix 1). Because of their small size and anthropomorphic appeal, people are interested in owning callitrichids as pets. Hand-raised bottle-fed babies are quite charming until sexual maturity, at which time they often become aggressive and unpredictable to humans, including their owners. Consequently, people should be discouraged from keeping callitrichids as pets. If a veterinarian is consulted about callitrichids by a potential owner before purchase, it may be possible to offer encouragement toward a more suitable pet (e.g., ferret and sugar glider).
Publication Type
Journal article.

<68>
Accession Number
20143412550
Author
Wilkinson, S. L.
Title
Guide to venomous reptiles in veterinary practice. (Special Issue: Unusual exotic pets.)
Source

Journal of Exotic Pet Medicine; 2014. 23(4):337-346. 21 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Venomous reptiles are common in zoo, research, and private collections. These animals will require veterinary care at some time during their captivity, and treating venomous reptiles can be both challenging and rewarding. Extensive training and experience in handling venomous reptiles, particularly snakes, is required before making the important decision on whether to add these patients to one's practice. Veterinarians who have a desire to treat venomous reptiles should be familiar with proper equipment, handling techniques, and special considerations required for these species. Veterinarians should also be prepared in the event of an emergency and aware of specific medical conditions affecting these species.
Publication Type
Journal article.

<69>
Accession Number
20133045531
Author
Melillo, A.
Title
Special Issue: Clinical and diagnostic pathology. (Special Issue: Clinical and diagnostic pathology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2013. 16(1):ix-x + 1-225.
Publisher
Elsevier, Inc.
Location of Publisher
New York
Country of Publication
USA
Abstract
This special issue contains 9 articles on the normal haematological and physiological values and clinical diagnosis of pathological conditions in exotic pets, including reptiles, birds, ferrets, rabbits and chinchillas.
Publication Type
Journal issue.

<70>
Accession Number
20133328660
Author
Fisher, P. G.
Title
Special Issue: Select topics in dermatology. (Special Issue: Select topics in dermatology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2013. 16(3):v-viii, xi-xii + 523-820.
Publisher
Elsevier, Inc.
Location of Publisher
New York

Country of Publication
USA
Abstract
This issue is comprised of 13 papers focusing on skin diseases in different animals. Topics discussed include clinical approach to dermatological disease in exotic animals, cutaneous neoplasms in rabbits, ferrets and guineapigs, erythema multiforme in ferrets, ectoparasites in small exotic mammals, emerging fungal pathogen of captive and wild reptiles, amphibian chytridiomycosis pathogenesis, diagnosis and treatment, viral dermatopathies in fish, viral skin diseases of rabbits, pododermatitis in rabbits, rodents and birds, dermatitis (vesicular, ulcerative and necrotic) in reptiles, ovarian cysts in guineapigs, dermatological conditions of captive avian species and behavioural dermatopathies in small mammals.
Publication Type
Journal issue.

<71>
Accession Number
20123122518
Title
Special Issue: New approaches for assessing the impacts of non-native freshwater fishes in the Mediterranean Region. (Special Issue: New approaches for assessing the impacts of non-native freshwater fishes in the Mediterranean Region.)
Source
Fisheries Management and Ecology; 2012. 19(2):89-187.
Publisher
Wiley-Blackwell
Location of Publisher
Oxford
Country of Publication
UK
Abstract
This special issue contains topics on how to assess the distribution, ecology and invasiveness of introduced fishes in the Mediterranean Region freshwater ecosystems, with implications for conservation of native fishes.
Publication Type
Journal issue.

<72>
Accession Number
20123129679
Author
Clauss, M.
Title
Clinical technique: feeding hay to rabbits and rodents. (Special Issue: Clinical anesthesia and analgesia.)
Source
Journal of Exotic Pet Medicine; 2012. 21(1):80-86. 32 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract

The recommended diets of pet rabbits and herbivorous rodents are often based on hays (dried forages) as the staple diet item. The rationale for this recommendation is a combination of logistical factors (i.e., hays are more readily available than a constant supply of fresh forage) and health concerns (i.e., using hays rather than fruits, nonleafy vegetables, and grain products apparently circumvents several health problems). Offering a variety of hays is a feeding concept that has so far received little attention. The choice of hays should be based primarily on a hygienic evaluation. Although hays have to be of impeccable hygienic quality, they need not necessarily be of high nutritive quality. A high proportion of stems and high-fiber material may be adequate for the maintenance of herbivores, and hays of higher nutritional quality can be used as dietary supplements in animals with increased energy requirements. Educating pet owners about the use of multiple hay combinations and the appreciation of the nutritive variety of hays may represent an opportunity for channeling interest and engagement in their animal while concurrently providing a preventive health measure.

Publication Type
Journal article.

<73>

Accession Number
20123129673

Author
Wenger, S.

Title
Anesthesia and analgesia in rabbits and rodents. (Special Issue: Clinical anesthesia and analgesia.)

Source
Journal of Exotic Pet Medicine; 2012. 21(1):7-16. 58 ref.

Publisher
Elsevier

Location of Publisher
New York

Country of Publication
USA

Abstract
Rabbits and rodents are popular pets and are often presented to veterinarians for evaluation and medical treatment. Anesthesia in exotic pets is required for many diagnostic and surgical procedures and is associated with a higher perioperative risk in rabbits and rodents when compared with dogs and cats. Inhalation anesthetic agents are commonly used as the sole source of anesthesia in small rodents, whereas injectable agents in combination with inhalation anesthesia are often used for rabbits and larger rodents. Analgesia is an important component of exotic pet medicine. Although it may be difficult to recognize signs of pain in companion exotic mammals, adequate pain management should always be provided. Opioid and nonsteroidal antiinflammatory drugs are the analgesic medications of choice, but others should be considered (e.g., local anesthetic agents). This article provides an update of the current literature regarding anesthesia and analgesia in rabbits and rodents.

Publication Type
Journal article.

<74>

Accession Number
20123303584

Title
Special Issue: Biological invasion. (Special Issue: Biological invasion.)

Source
Integrative Zoology; 2012. 7(3):227-311.

Publisher

Wiley-Blackwell
Location of Publisher
Melbourne
Country of Publication
Australia
Abstract
This issue is comprised of 6 papers on biological invasion, dealing with the ecological impact of different groups of alien animals, including mammals, snakes, insects, molluscs and other marine organisms. The scope covers Europe, the Mediterranean basin and Florida. An update on mammal invasions in Europe since the Neolithic, including an assessment of the overall impact of intentional and unintentional introductions, was presented. A synthetic, updated study on the bioinvasions in the Mediterranean Sea is also presented, pointing out the presence of more than 660 multicellular alien species. Focus is given on the temporal and spatial spread of some scyphozoans and ctenophores. The genetic structure of the populations of a non-predatory gastropod introduced in the European Atlantic Sea is discussed. Two of the papers covers the ecology and impact of Asian giant snakes, Burmese pythons. The results of the introduction in Europe of alien insects specialized in the exploitation of tree seeds are also discussed.
Publication Type
Journal issue.

<75>
Accession Number
20123327676
Author
O'Connor, R. K.
Title
Working raptors and veterinary medicine: preserving the client/Veterinarian relationship. (Special Issue: Exotic animal training and learning.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2012. 15(3):501-511.
Publisher
Elsevier, Inc.
Location of Publisher
New York
Country of Publication
USA
Publication Type
Journal article.

<76>
Accession Number
20123327674
Author
Brown, S. A.
Title
Small mammal training in the veterinary practice. (Special Issue: Exotic animal training and learning.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2012. 15(3):469-485.
Publisher
Elsevier, Inc.
Location of Publisher
New York
Country of Publication

USA
Publication Type
Journal article.

<77>
Accession Number
20113000074
Author
Weese, J. S.
Title
Methicillin-resistant Staphylococcus aureus in animals. (Special Issue: One health: the intersection of humans, animals, and the environment.)
Source
ILAR Journal; 2010. 51(3):233-244.
Publisher
Institute of Laboratory Animal Resources (ILRA)
Location of Publisher
Washington
Country of Publication
USA
Abstract
Methicillin-resistant Staphylococcus aureus (MRSA) is a critically important human pathogen that is also an emerging concern in veterinary medicine and animal agriculture. It is present in a wide range of animal species, including dogs, cats, rabbits, horses, cattle, pigs, poultry, and exotic species, both as a cause of infection and in healthy carriers. Identification of MRSA in various species and in food has led to concerns about the roles of animals, both pets and livestock, in the epidemiology of MRSA infection and colonization in humans. There is evidence of the role of food animals in human MRSA infections in some countries and of pets as a possible source of human infection. Some groups of individuals who work closely with animals, such as veterinarians, have high MRSA colonization rates. This article includes discussions of MRSA in human medicine, animals, and food, as well as its interspecies transmission, colonization, infection, strains, and affected populations. However, clear answers are lacking in many of these areas and limited studies may lead to premature conclusions. It is certain that animals are a source of human MRSA infection in some circumstances - but humans may also serve as sources of infection in animals. Changes in the epidemiology of MRSA in one species may be reflected in changes in other species. The true scope of MRSA in animals and its impact on human health are still only superficially understood, but it is clear that MRSA is a potentially important veterinary and public health concern that requires a great deal more study to enhance understanding and effective response.
Publication Type
Journal article.

<78>
Accession Number
20113015070
Author
Collins, J. P.
Title
Amphibian decline and extinction: what we know and what we need to learn? (Special Issue: Chytridiomycosis: an emerging disease.)
Source
Diseases of Aquatic Organisms; 2010. 92(2/3):93-99.
Publisher
Inter-Research

Location of Publisher
Oldendorf/Luhe
Country of Publication
Germany
Abstract
For over 350 million yr, thousands of amphibian species have lived on Earth. Since the 1980s, amphibians have been disappearing at an alarming rate, in many cases quite suddenly. What is causing these declines and extinctions? In the modern era (post 1500) there are 6 leading causes of biodiversity loss in general, and all of these acting alone or together are responsible for modern amphibian declines: commercial use; introduced/exotic species that compete with, prey on, and parasitize native frogs and salamanders; land use change; contaminants; climate change; and infectious disease. The first 3 causes are historical in the sense that they have been operating for hundreds of years, although the rate of change due to each accelerated greatly after about the mid-20th century. Contaminants, climate change, and emerging infectious diseases are modern causes suspected of being responsible for the so-called 'enigmatic decline' of amphibians in protected areas. Introduced/exotic pathogens, land use change, and infectious disease are the 3 causes with a clear role in amphibian decline as well as extinction; thus far, the other 3 causes are only implicated in decline and not extinction. The present work is a review of the 6 causes with a focus on pathogens and suggested areas where new research is needed. Batrachochytrium dendrobatidis (Bd) is a chytrid fungus that is an emerging infectious disease causing amphibian population decline and species extinction. Historically, pathogens have not been seen as a major cause of extinction, but Bd is an exception, which is why it is such an interesting, important pathogen to understand. The late 20th and early 21st century global biodiversity loss is characterized as a sixth extinction event. Amphibians are a striking example of these losses as they disappear at a rate that greatly exceeds historical levels. Consequently, modern amphibian decline and extinction is a lens through which we can view the larger story of biodiversity loss and its consequences.
Publication Type
Journal article.

<79>
Accession Number
20113110740
Author
Poulin, R.; Paterson, R. A.; Townsend, C. R.; Tompkins, D. M.; Kelly, D. W.
Title
Biological invasions and the dynamics of endemic diseases in freshwater ecosystems. (Special Issue: Emerging freshwater diseases.)
Source
Freshwater Biology; 2011. 56(4):676-688. many ref.
Publisher
Wiley-Blackwell
Location of Publisher
Oxford
Country of Publication
UK
Abstract
Biological invasions, still occurring worldwide at an alarming rate, are widely acknowledged as threats to the integrity and functioning of ecosystems. In addition to introducing disease, biological invasions have also been linked to sudden increases in the incidence or severity of previously existing diseases. We review and illustrate the potential direct and indirect impacts of introduced species on the dynamics of endemic parasites in freshwater ecosystems. Introduced species may trigger and sustain disease emergence by acting as competent hosts for endemic parasites in which infection is amplified and then 'spilled back' to native hosts. In contrast, if introduced species are not suitable hosts for endemic parasites but become infected anyway, they may act as sinks for parasites and thus dilute disease risk for native hosts. Another mechanism by which introduced species can influence endemic parasitic diseases is by altering the relative abundance of one of the parasite's hosts in ways that could either enhance or reduce disease transmission to other native hosts in the parasite's life cycle. Introduced species may also alter disease incidence and severity in native

hosts through trait-mediated indirect effects. For example, the introduced species could change the exposure or susceptibility of native hosts to infection by causing alterations in their behaviour or immunocompetence. Also, by directly changing physicochemical conditions and modifying environmental stressors introduced species may indirectly affect native host exposure and/or resistance to disease. A survey of parasites infecting introduced freshwater fish in four distinct geographical areas revealed that use of non-indigenous hosts by endemic parasites is widespread, mostly involving parasites transmitted via the food chain. We conclude by presenting a framework, based on risk assessment, for the prediction and possible mitigation of the impact of introduced species on endemic diseases and by calling for greater recognition of the potential role of invasive species as triggers of endemic disease emergence.
Publication Type
Journal article.

<80>
Accession Number
20113148243
Author
Gray, T. Z.
Title
Update: reptiles and Salmonella. (Special Issue: Zoonotic diseases.)
Source
Journal of Exotic Pet Medicine; 2011. 20(1):14-17. 17 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Salmonellosis continues to be an important disease in both humans and animals. Although there are many sources of Salmonella spp. exposure to humans, reptiles and amphibians are still considered a primary source of these bacteria. Despite the 1975 US Food and Drug Administration regulations restricting the sale and movement of turtles less than 4 inches in length, reptile-associated salmonellosis in humans continues to be reported. This article will review current research on the prevalence, detection, elimination, and prevention of Salmonella spp. infections associated with reptile species and methods for preventing human illness.
Publication Type
Journal article.

<81>
Accession Number
20113169351
Author
Johnson, D. H.
Title
Endoscopic intubation of exotic companion mammals. (Special Issue: Endoscopy and endosurgery.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2010. 13(2):273-289.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication

USA
Abstract
Rabbits, guinea pigs, chinchillas and many other small exotic mammals are not intubated routinely, because intubation requires specialized equipment and is difficult to perfect. Using a face mask for these species solely on the basis that they are unable to regurgitate ignores the numerous other benefits of airway control. This article summarizes the many advantages of endotracheal intubation and the various methods of intubation that have been reported. It introduces endoscopic intubation as a method that overcomes many of the difficulties associated with other methods and describes the equipment needed, how to intubate with an endoscope, how to confirm proper endotracheal tube placement, and possible complications. Over-the-endoscope intubation is discussed in detail, as it appears to provide the most versatile and reliable method of intubating exotic companion mammals.
Publication Type
Journal article.

<82>
Accession Number
20113169350
Author
Divers, S. J.
Title
Exotic mammal diagnostic endoscopy and endosurgery. (Special Issue: Endoscopy and endosurgery.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2010. 13(2):255-272.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Despite the extensive use of endoscopy in avian and domestic animal practice, inclusion of exotic mammals (rabbits, rodents, ferrets, and so forth) in the endoscopist's case load is a much more recent phenomenon. Initially used as a means for the detailed evaluation of the oral cavity, rigid endoscopy has also become invaluable for the evaluation of the nasal cavity, urogenital tract, and increasingly for laparoscopic procedures. This article summarizes the most common procedures used by the author for first opinion and referral cases, and introduces some of the recent developments that are expected to become the standard of care in exotic animal practice in the future.
Publication Type
Journal article.

<83>
Accession Number
20113169348
Author
Divers, S. J.
Title
Reptile diagnostic endoscopy and endosurgery. (Special Issue: Endoscopy and endosurgery.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2010. 13(2):217-242.
Publisher
Elsevier, Inc.,
Location of Publisher

New York
Country of Publication
USA
Abstract
The 2.7-mm telescope commonly used in avian practice has transitioned into an invaluable diagnostic tool for the reptile clinician. Previously plagued by vague medical histories, nonpathognomonic physical examinations, indistinct diagnostic images, and less than conclusive clinical pathology results, the reptile clinician often has had trouble making a definitive, antemortem diagnosis. A definitive diagnosis generally relies on the demonstration of a host pathologic response and the causative agent. The ability to examine internal structures and collect biopsies has enabled many postmortem diagnoses to now be appreciated in the living animal, and along with accurate diagnosis comes accurate prognosis and improved case management. The advent of 3-mm human pediatric laparoscopy equipment has fueled interest in minimally invasive endosurgery in exotic pets, including reptiles. However, the chelonian shell has also served as a catalyst to speed the development of surgical approaches to the coelom that do not involve major shell surgery. This article summarizes the most common endoscopic approaches in lizards, chelonians, and snakes for the purposes of making a diagnosis and increasingly performing endosurgery.
Publication Type
Journal article.

<84>
Accession Number
20113204075
Author
Capello, V.; Lennox, A. M.
Title
Diagnostic imaging of the respiratory system in exotic companion mammals. (Special issue: The exotic animal respiratory system.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2011. 14(2):369-389. 26 ref.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
The level of care for smaller companion mammals has increased significantly during the past few years. Today, exotic companion mammals are acknowledged as a specific area of zoologic medicine. Owner demands for a higher level of care is increasing dramatically. Because most of these patients are small (less than 2 kg), this represents a great challenge, in particular for the field of diagnostic imaging. This article reviews the 5 main diagnostic imaging modalities currently available for investigation of the respiratory system of exotic companion mammals: radiography, ultrasonography, endoscopy, computed tomography, and magnetic resonance.
Publication Type
Journal article.

<85>
Accession Number
20113204074
Author
Johnson-Delaney, C. A.; Orosz, S. E.
Title

Ferret respiratory system: clinical anatomy, physiology, and disease. (Special issue: The exotic animal respiratory system.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2011. 14(2):357-367. 11 ref.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
The upper and lower respiratory tracts of ferrets have several similarities to humans, and therefore have been used as a research model for respiratory function. This article describes the clinical anatomy and physiology, and common respiratory diseases of the ferret.
Publication Type
Journal article.

<86>
Accession Number
20113204073
Author
Yarto-Jaramillo, E.
Title
Respiratory system anatomy, physiology, and disease: guinea pigs and chinchillas. (Special issue: The exotic animal respiratory system.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2011. 14(2):339-355. 37 ref.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Respiratory diseases are common in guinea pigs and chinchillas. There are multifactorial causes of respiratory involvement in these species of rodents, from infectious (bacterial, viral, and fungal) to neoplastic causes. Toxicoses and diseases affecting other systems may also induce respiratory signs. Knowledge of biology, including husbandry, nutritional requirements, and behavior, are important clues for the clinician to determine the role these issues may play in the development, progression, and prognosis of respiratory clinical cases in rodents. Current approaches in the diagnosis and therapy for respiratory disease in small mammals warrant more research concerning response-to-treatment reports.
Publication Type
Journal article.

<87>
Accession Number
20113204072
Author
Kling, M. A.
Title
A review of respiratory system anatomy, physiology, and disease in the mouse, rat, hamster, and gerbil. (Special issue: The exotic animal respiratory system.)

Source
Veterinary Clinics of North America: Exotic Animal Practice; 2011. 14(2):287-337. 179 ref.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
The purpose of this article is to provide for practitioners a comprehensive overview of respiratory diseases, both infectious and noninfectious, in the mouse, rat, hamster, and gerbil. The information presented will also be useful for veterinarians pursuing board certification. Anatomy and physiology are briefly addressed, as those two facets alone could encompass an entire article for these species.
Publication Type
Journal article.

<88>
Accession Number
20113204071
Author
Johnson, D. H.
Title
Hedgehogs and sugar gliders: respiratory anatomy, physiology, and disease. (Special issue: The exotic animal respiratory system.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2011. 14(2):267-285. 82 ref.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
This article discusses the respiratory anatomy, physiology, and disease of African pygmy hedgehogs (Atelerix albiventris) and sugar gliders (Petaurus breviceps), two species commonly seen in exotic animal practice. Where appropriate, information from closely related species is mentioned because cross-susceptibility is likely and because these additional species may also be encountered in practice. Other body systems and processes are discussed insofar as they relate to or affect respiratory function. Although some topics, such as special senses, hibernation, or vocalization, may seem out of place, in each case the information relates back to respiration in some important way.
Publication Type
Journal article.

<89>
Accession Number
20113204070
Author
Johnson-Delaney, C. A.; Orosz, S. E.
Title
Rabbit respiratory system: clinical anatomy, physiology and disease. (Special issue: The exotic animal respiratory system.)
Source

Veterinary Clinics of North America: Exotic Animal Practice; 2011. 14(2):257-266. 5 ref.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Rabbits are obligate nose breathers due to their epiglottis positioned rostrally to the soft palate. Any obstruction within the nasal cavity will produce a respiratory wheeze with increased respiratory effort. Respiratory diseases are a major cause of morbidity and mortality in rabbits. This article focuses on these diseases and their causative pathogens.
Publication Type
Journal article.

<90>
Accession Number
20113204067
Author
Schumacher, J.
Title
Respiratory medicine of reptiles. (Special issue: The exotic animal respiratory system.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2011. 14(2):207-224. 45 ref.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Noninfectious and infectious causes have been implicated in the development of respiratory tract disease in reptiles. Treatment modalities in reptiles have to account for species differences in response to therapeutic agents as well as interpretation of diagnostic findings. Data on effective drugs and dosages for the treatment of respiratory diseases are often lacking in reptiles. Recently, advances have been made on the application of advanced imaging modalities, especially computed tomography for the diagnosis and treatment monitoring of reptiles. This article describes common infectious and noninfectious causes of respiratory disease in reptiles, including diagnostic and therapeutic regimen.
Publication Type
Journal article.

<91>
Accession Number
20113204066
Author
Roberts, H. E.; Smith, S. A.
Title
Disorders of the respiratory system in pet and ornamental fish. (Special issue: The exotic animal respiratory system.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2011. 14(2):179-206. 87 ref.
Publisher

Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
The respiratory organ of fish is the gill. In addition to respiration, the gills also perform functions of acid-base regulation, osmoregulation, and excretion of nitrogenous compounds. Because of their intimate association with the environment, the gills are often the primary target organ of pollutants, poor water quality, infectious disease agents, and noninfectious problems, making examination of the gills essential to the complete examination of sick individual fish and fish populations. The degree of response of the gill tissue depends on type, severity, and degree of injury and functional changes will precede morphologic changes. Antemortem tests and water quality testing can, and should, be performed on clinically affected fish whenever possible.
Publication Type
Journal article.

<92>
Accession Number
20113244798
Author
Phair, K.; Carpenter, J. W.; Marrow, J.; Andrews, G.; Bawa, B.
Title
Management of an extraskeletal osteosarcoma in an African hedgehog (Atelerix albiventris). (Special Issue: Avian/exotic medicine by clinicians for clinicians.)
Source
Journal of Exotic Pet Medicine; 2011. 20(2):151-155. 9 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
A 5-year-old female African hedgehog (Atelerix albiventris) was presented with a mass on its left caudodorsal flank and progressive lethargy. A fine-needle aspirate of the mass was suggestive of a malignant spindle cell tumor. After the diagnostic test results were obtained, the mass was surgically removed. Histopathological examination of tissue sections from the mass revealed incomplete excision of an extraskeletal osteosarcoma. Approximately 2 months after surgery, the patient suddenly died. Gross examination at necropsy revealed multifocal nodules within the spleen, liver, and lungs. Histopathology of the tissues that contained the multifocal nodules was consistent with metastatic osteosarcoma, originating from the original extraskeletal soft tissue osteosarcoma on the flank. Incidental uterine leiomyoma was also discovered at necropsy. To the authors' knowledge, this is the first reported attempt at surgical treatment of the rarely documented extraskeletal osteosarcoma in a hedgehog.
Publication Type
Journal article.

<93>
Accession Number
20113244797
Author
Rainwater, K. A. E.; Hawkins, M. G.; Crabbs, T.; Malka, S.

Title
An anaplastic sarcoma of probable salivary origin in a teddy-bear hamster (Mesocricetus auratus). (Special Issue: Avian/exotic medicine by clinicians for clinicians.)
Source
Journal of Exotic Pet Medicine; 2011. 20(2):144-150. 39 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
There is a paucity of published information regarding spontaneous neoplasms affecting pet hamsters. This article describes a spontaneous anaplastic sarcoma of probable salivary origin in a pet Syrian hamster (Mesocricetus auratus). A 1-year-old hamster was presented with a subcutaneous mass along the right ventrolateral region of the neck, resulting in a partial eversion of the right cheek pouch. The mass was surgically removed and the patient recovered without complications. Approximately 157 days later, the patient was presented for a second mass in the same location and the owners elected to euthanize the hamster. Postmortem histopathological and immunohistochemical analysis of both masses demonstrated highly anaplastic neoplasms of mesenchymal origin. The masses were not directly associated with the cheek pouch and were presumed to have a salivary tissue origin.
Publication Type
Journal article.

<94>
Accession Number
20113244795
Author
Lierz, M.; Fischer, D.
Title
Clinical technique: imping in birds. (Special Issue: Avian/exotic medicine by clinicians for clinicians.)
Source
Journal of Exotic Pet Medicine; 2011. 20(2):131-137. 13 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Birds often are presented with damaged flight feathers to veterinary practices that treat avian species. Pet birds will have traumatized, self-damaged, or diseased feathers. Additionally, damaged flight and/or tail feathers are regularly diagnosed in injured or debilitated free-ranging birds. In many cases in which feather damage is diagnosed, imping of the damaged feathers is an easy technique one may use to restore the flight capability of the bird, thereby decreasing the time needed for rehabilitation. The techniques for imping damaged bird feathers are described in detail along with the risk factors associated with this corrective procedure.
Publication Type
Journal article.

<95>
Accession Number

20113244794
Author
Johnson, R.
Title
Clinical technique: handling and treating venomous snakes. (Special Issue: Avian/exotic medicine by clinicians for clinicians.)
Source
Journal of Exotic Pet Medicine; 2011. 20(2):124-130. 10 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
This article describes safe handling techniques for venomous snakes in the consulting room. Practical information is presented for clinicians who treat venomous snakes to reduce the risk of injury to the handler as well as the animal being treated.
Publication Type
Journal article.

<96>
Accession Number
20113267227
Author
O'Hagan, B. J.; Raidal, S. R.
Title
Surgical removal of retrobulbar hemangioma in a goldfish (Carassius auratus). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):729-733.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
The surgical removal of a retrobulbar hemangioma is described in a mature fantail goldfish (Carassius auratus) with a 6-week history of a swollen right eye. The fish was anesthetized using alfaxalone at a concentration in the water of 5 mg/L to facilitate fine-needle aspiration and surgical removal of the eye. The fish was treated with enrofloxacin 5 mg intraperitoneally and recovered with major buoyancy deficits that corrected 20 minutes after treatment with methadone at a dose of 0.4 mg intramuscularly. Histologic examination of the excised tissue demonstrated that the tumor was a compact hemangioma.
Publication Type
Journal article.

<97>
Accession Number
20113267226
Author
Hunt, C. J. G.

Title
Ulcerative skin disease in a group of koi carp (Cyprinus carpio). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):723-728.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
A case report detailing the presenting clinical signs, diagnostics, and treatment of ulcerative skin disease in a group of koi carp (Cyprinus carpio) is presented.
Publication Type
Journal article.

<98>
Accession Number
20113267225
Author
Martinho, F.
Title
Suspected case of hyperadrenocorticism in a golden hamster (Mesocricetus auratus). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):717-721.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Dermatologic disease is a common problem in pet rodents. This article describes the case of a pet golden hamster (Mesocricetus auratus) with dermatologic and other clinical signs (polyuria, polydypsia) similar to those found in other mammalian species with hyperadrenocorticism. Among other diagnostic tests, the urine cortisol/ creatinine ratio was measured and was found to be increased, which appeared to support the diagnosis. Treatment with ketoconazole was initiated, without apparent success.
Publication Type
Journal article.

<99>
Accession Number
20113267224
Author
Martinho, F.
Title
Dystocia caused by ectopic pregnancy in a guinea pig (Cavia porcellus). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):713-716.

Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Dystocia is a common problem in guinea pigs, usually associated with complete fusion of the pubic symphysis. In this article, a less common problem, ectopic pregnancy, is described.
Publication Type
Journal article.

<100>
Accession Number
20113267223
Author
Carmel, B.
Title
Eosinophilic gastroenteritis in three ferrets. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):707-712.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Eosinophilic gastroenteritis (EGE) is a rarely reported condition of ferrets. This article reviews three cases of suspected EGE in ferrets, summarizes the presenting signs, differential diagnoses, and treatment options, and discusses some questions raised by this disease in ferrets. Immune suppression by means of prednisolone therapy is currently the treatment of choice.
Publication Type
Journal article.

<101>
Accession Number
20113267222
Author
Graham, J.; Fidel, J.; Mison, M.
Title
Rostral maxillectomy and radiation therapy to manage squamous cell carcinoma in a ferret. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):701-706.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract

A4-year-old, male, neutered ferret presented with squamous cell carcinoma of the right maxillary region associated with the tissues surrounding the upper canine tooth. A rostral maxillectomy was performed to excise the mass. Histopathologic examination showed questionable margins of tumor removal. Approximately 2 months after surgery, the ferret received a course of radiation therapy and is currently being monitored for tumor regrowth.
Publication Type
Journal article.

<102>
Accession Number
20113267221
Author
Jekl, V.; Hauptman, K.; Jeklova, E.; Dorrestein, G. M.; Knotek, Z.
Title
Hydrometra in a ferret - case report. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):695-700.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
A desexed female ferret was presented with bilateral alopecic changes. Clinical examination revealed generalized alopecia and abdominal distension. Apolycystic mass was found behind the right kidney, and the whole abdomen was filled with a large turgid mass. Radiography and ultrasonography confirmed the presumptive diagnosis of a hydrometra. Hematology and serum biochemistry showed regenerative anemia with light azotemia. Laparotomy showed the presence of a neoplastic mass at the location of the right ovary, a massive enlargement of the uterus filled with a clear fluid, and a subcapsular cyst on the left kidney. After surgery, histopathologic examination of the tissues diagnosed a leiomyoma of the right ovary with hyperplasia of the uterine wall.
Publication Type
Journal article.

<103>
Accession Number
20113267220
Author
Darby, C.; Ntavlourou, V.
Title
Hepatic hemangiosarcoma in two ferrets (Mustela putorius furo). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):689-694.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract

Two ferrets were presented to the authors' clinics. Hemoperitoneum was diagnosed in one ferret, and an abdominal mass was palpated in the other. One ferret was euthanized and necropsied, and one ferret underwent exploratory laparotomy and liver lobectomy. In both cases, the histopathologic diagnosis was hepatic hemangiosarcoma.
Publication Type
Journal article.

<104>
Accession Number
20113267219
Author
Guzman, D. S. M.; Mayer, J.; Melidone, R.; McCarthy, R. J.; McCobb, E.; Kavirayani, A.; Rush, J. E.
Title
Pacemaker implantation in a ferret (Mustela putorius furo) with third-degree atrioventricular block. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):677-687.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
A 7.5-year-old castrated male ferret (Mustela putorius furo) was diagnosed with third-degree atrioventricular (AV) block. A monopolar epicardial pacemaker system was implanted, resulting in a regular, paced cardiac rhythm with third-degree AV block at 140 beats per minute. Over the next 2 months, the ferret developed anorexia, interstitial pneumonia, intermittent diarrhea, and hind-limb weakness and had a slow and progressive recovery. The ferret developed clinical signs of congestive heart failure 4 months after the surgery, resulting in its death 3 weeks later. Necropsy results attributed the death to cardiac failure due to extensive myocardial mineralization. To the authors' knowledge this is the first published report of surgical pacemaker implantation in a ferret.
Publication Type
Journal article.

<105>
Accession Number
20113267218
Author
Vannevel, J. Y.
Title
Clinical presentation of pituitary adenomas in rats. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):673-676.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract

This article describes the clinical presentation of central vestibular disease secondary to pituitary adenoma as it manifested in six rats. Prognosis is poor. Recommendations are made regarding questions to ask and advice to offer owners when dealing with these cases.
Publication Type
Journal article.

<106>
Accession Number
20113267217
Author
Morera, N.; Valls, X.; Mascort, J.
Title
Intervertebral disk prolapse in a ferret. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):667-671.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
This case report describes the diagnosis and resolution of an intervertebral disk prolapse in a 6-year-old ferret. No predisposing causes were found in the patient's history. A right hemilaminectomy, performed 1 week after presentation, was chosen to treat the patient surgically, and complete remission of clinical signs was achieved 2 months after presentation.
Publication Type
Journal article.

<107>
Accession Number
20113267216
Author
Ward, M. L.
Title
Diagnosis and management of a retrobulbar abscess of periapical origin in a domestic rabbit. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):657-665.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Retrobulbar abscessation is the most common orbital disease of rabbits, and the lesions are notoriously difficult to treat successfully. This article describes the diagnosis, surgical treatment, and long-term management of an extensive abscess located within the right maxilla and retrobulbar space of a domestic rabbit. Preoperative assessment and long-term monitoring were achieved with a combination of radiography, ophthalmic ultrasonography, and CT. Extraoral rigid endoscopy via a fenestration in the maxilla was used to facilitate surgical debridement of the lesion, and extraction of multiple cheek teeth has been fundamental to

achieving control. The long-term use of topical and systemic antibiotic preparations and nonsteroidal anti-inflammatory medication is discussed.
Publication Type
Journal article.

<108>
Accession Number
20113267214
Author
Whittington, J. K.; Emerson, J. A.; Satkus, T. M.; Tyagi, G.; Barger, A.; Pinkerton, M. E.
Title
Exocrine pancreatic carcinoma and carcinomatosis with abdominal effusion containing mast cells in a ferret (Mustela putorius furo). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):643-650.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
This case describes the clinical presentation and findings of exocrine pancreatic carcinoma in a 9-year-old female spayed ferret (Mustela putorius furo). Transcoelomic metastasis and hemorrhagic abdominal effusion were secondary to the neoplasm. The finding of mast cells in the abdominal effusion, with a leukocyte component composed primarily of lymphocytes and lesser numbers of neutrophils and macrophages, is an atypical finding, never before reported in ferrets.
Publication Type
Journal article.

<109>
Accession Number
20113267213
Author
Rhody, J. L.
Title
Unilateral nephrectomy for hydronephrosis in a pet rabbit. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):633-641.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
A young adult rabbit was diagnosed with unilateral hydronephrosis. The affected kidney was surgically removed. Nearly 3 years after the nephrectomy, the rabbit is doing well. The diagnosis, surgery, and pathophysiology of unilateral renal obstruction are discussed in this article.
Publication Type
Journal article.

<110>
Accession Number
20113267212
Author
Rhody, J. L.; Schiller, C. A.
Title
Spinal osteosarcoma in a hedgehog with pedal self-mutilation. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):625-631.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
An African pygmy hedgehog (Atelerix albiventris) was diagnosed with osteosarcoma of vertebral origin with compression of the spinal cord and spinal nerves. The only presenting sign was self-mutilation of rear feet. Additional diagnoses included a well-differentiated splenic hemangiosarcoma, an undifferentiated sarcoma of the ascending colon, and membranoproliferative glomerulonephritis.
Publication Type
Journal article.

<111>
Accession Number
20113267211
Author
Barrows, M.
Title
Toxoplasmosis in a colony of sugar gliders (Petaurus breviceps). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):617-623.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Eleven of a group of 16 sugar gliders died acutely over a period of 2 to 3 weeks. Histopathologic examination revealed a systemic protozoal infection with tachyzoites present in multiple organs, including the intestine, heart, brain, spleen, pancreas, adrenal gland, and kidney. Immunostaining confirmed disseminated toxoplasmosis. Marsupials are susceptible to toxoplasmosis. It was thought that the sugar gliders acquired the infection through foraging in wood chips used as a substrate that were contaminated with feline fecal material.
Publication Type
Journal article.

<112>
Accession Number
20113267210
Author
Vannevel, J. Y.
Title
Glomerulonephritis and anasarca in a colony of frogs. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):609-616.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
A colony of frogs experienced excessive mortality due to glomerulonephritis. The presenting symptom in all cases was bloating due to hydrocoelom and anasarca. Mycobacteria sp was suspected to be a source of chronic antigenic stimulation that resulted in the glomerulonephritis. The prognosis was grave once symptoms appeared. Histopathology from some of the affected frogs is described, and mycobacterial disease in amphibians is discussed.
Publication Type
Journal article.

<113>
Accession Number
20113267209
Author
Gladden, J. N.
Title
Clinical management of potential ibuprofen toxicosis in a South American red-footed tortoise (Geochelone carbonaria). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):599-607.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
This article describes the clinical management of potential ibuprofen toxicosis in South American red-footed tortoise (Geochelone carbonaria). A 2.5-year-old, 0.78-kg Geochelone carbonaria tortoise was presented to the emergency clinic after ingesting solubilized ibuprofen (200 mg) in a gelatin capsule. Treatment on initial presentation consisted of esophagostomy tube placement for gastric lavage and activated charcoal administration, intravenous and intraosseous fluid therapy, and administration of gastrointestinal protectants (sucralfate and famotidine). The tortoise was discharged to the owners. Although follow-up diagnostic monitoring was minimal because of owner compliance, the patient was noted to be alive and in reasonable health 1 year after initial presentation. This is the first report on the management of potential nonsteroidal antiinflammatory drug toxicosis in any chelonian species.
Publication Type
Journal article.

<114>
Accession Number
20113267208
Author
Simpson, M.
Title
Hepatic lipidosis in a black-headed python (Aspidites melanocephalus). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):589-598.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
The number of people keeping reptiles in captivity has markedly increased, and widespread inappropriate husbandry will result in an increasing incidence of the diagnosis of hepatic lipidosis (HL). It may become apparent that some species of snakes have a predisposition to develop HL. In the specific instance of the genus Aspidites, alterations to the usual husbandry that limit feeding and thereby body weight should markedly lessen the chance of the animal's developing HL. It is important for clinicians to develop a more aggressive approach to these cases and to build a bank of data with which to promote understanding of this common malady.
Publication Type
Journal article.

<115>
Accession Number
20113267207
Author
Vaughan, R. J.; Vitali, S. D.; Payne, K. L.; Eden, P. A.
Title
A splendid tree frog with edema syndrome and intestinal adenocarcinoma. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):583-587.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
A splendid tree frog (Pelodryas splendida) presented with subcutaneous edema extending along its dorsum from head to vent, which resolved with improvement of ambient temperature and humidity conditions in its enclosure. Four months later, this same frog presented in a moribund state with intracoelomic fluid accumulation. An intestinal adenocarcinoma, a rarely reported neoplasm in amphibians, was diagnosed post mortem. Neoplasia is one of a number of causes of edema syndrome, which is a nonspecific response to disease and debility in anurans.
Publication Type

Journal article.

<116>
Accession Number
20113267206
Author
Johnson, R.
Title
Dystocia in an injured common eastern long-necked turtle (Chelodina longicollis). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):575-581.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Dystocia in the class Reptilia is a common problem. In turtles, it is often difficult to distinguish between a normal gravid state and dystocia. This case report describes nonobstructive dystocia in a free-living freshwater chelonian, Chelodina longicollis, complicated by traumatic injuries to the head, bridge, and plastron. Medical treatment of the dystocia and external fixation of the facial injuries provided a successful outcome.
Publication Type
Journal article.

<117>
Accession Number
20113267205
Author
Hunt, C. J. G.
Title
Herpesvirus outbreak in a group of Mediterranean tortoises (Testudo spp). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):569-574.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
ChHV and Mycoplasma agassizii infections in tortoises share similar clinical signs of lethargy, anorexia, rhinitis, and conjunctivitis. In addition, ChHV infection is associated with glossitis and stomatitis and often causes high morbidity and mortality. As was seen in this case, ChHV infection tends to cause higher mortality in T. hermanni compared with T. graeca and T. marginata. T. horsfieldi is also considered highly susceptible to ChHV but appeared unaffected in this outbreak.
Publication Type
Journal article.

<118>
Accession Number
20113267204
Author
Kramer, M. H.
Title
Granulomatous osteomyelitis associated with atypical mycobacteriosis in a bearded dragon (Pogona vitticeps). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):563-568.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
The zoonotic potential of Mycobacterium spp has been well documented and has been implicated in cutaneous and subcutaneous nodular disease in humans. Treatment of infected reptiles is often not recommended, because of the zoonotic potential. Moreover, the often-advanced nature of the disease when diagnosed, the lengthy and expensive treatment regimens, and the lack of a reported successful treatment regimen for reptiles usually warrant euthanasia in these patients. Strict attention must be paid to cage hygiene and sanitation to minimize exposure and eliminate the organisms.
Publication Type
Journal article.

<119>
Accession Number
20113267203
Author
Youl, J. M.; Gartrell, B. D.
Title
Multidrug-resistant bacterial ingluvitis associated with squamous cell carcinoma in a budgerigar (Melopsittacus undulatus). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):557-562.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
A 2-year-old budgerigar (Melopsittacus undulatus) was presented to the Massey University Veterinary Teaching Hospital for chronic regurgitation. Multiple drug-resistant Klebsiella oxytoca was cultured from the crop. Necropsy revealed a mass in the crop that was histologically diagnosed as squamous cell carcinoma (SCC). To the authors' knowledge, this is the first report of SCC in a budgerigar associated with a multidrug-resistant bacterial ingluvitis.
Publication Type
Journal article.

<120>
Accession Number
20113267202
Author
Cannon, M. J.
Title
Unusual tracheal foreign body in an African grey parrot. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):551-556.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
This case report documents an unusual tracheal foreign body (a moth) in a Congo African grey parrot (Psittacus erithacus erithacus). Gross postmortem signs and histopathology results are presented. A discussion of the peculiar avian anatomy that may have contributed to the aspiration of the moth is provided.
Publication Type
Journal article.

<121>
Accession Number
20113267200
Author
Melillo, A.
Title
An interesting neurologic case in a lovebird (Agapornis fisheri). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):539-544.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
The pathogenic agent of proventricular dilatation disease causes a lymphoplasmacytic inflammation of the central and peripheral nervous systems. Usually, the splanchnic nerves are affected, with resultant gastrointestinal dysfunction and clinical signs related to this. When the brain, spinal cord, and peripheral nerves are affected, neurologic signs may be present in various degrees. This case emphasizes the importance of necropsy and histopathologic examination in making a diagnosis and treatment.
Publication Type
Journal article.

<122>

Accession Number
20113267199
Author
Grioni, A.
Title
Tibiotarsal fracture and neurologic problems of a black-eared kite (Milvus migrans). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):533-538.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
A wild-caught black-eared kite (Milvus migrans) was presented with a fracture of the right fibula and tibiotarsus that was repaired using combined crossed pins and a rigid cast technique. The fracture healed well; however, because the bird was not able to regain full use of its legs, radiographs were taken, which revealed a translucent structure involving the vertebral bodies of the notariumsynsacrum area. The condition of the bird deteriorated over the following days, and it was euthanized. Postmortem examination confirmed two bony intumescences involving the last vertebra of the notarium and the synsacrum. The vertebral canal, on a cut surface, was restricted, and the spinal cord was compressed.
Publication Type
Journal article.

<123>
Accession Number
20113267197
Author
Vitali, S. D.; Eden, P. A.; Payne, K. L.; Vaughan, R. J.
Title
An outbreak of mycobacteriosis in gouldian finches caused by Mycobacterium peregrinum. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):519-522.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
An outbreak of mycobacteriosis was detected in an aviary containing Gouldian finches (Erythrura gouldiae) and golden-shouldered parrots (Psephotus chrysopterygius). Affected birds developed granulomatous lesions, usually of the liver and intestine. Mycobacterium peregrinum, a species of the Mycobacterium fortuitum group, was cultured on pooled samples of intestinal tract from 31 euthanized finches. These rapid-growing mycobacteria are saprophytic organisms that are generally not associated with clinical disease in immunocompetent hosts. This is the first report of mycobacteriosis in finches implicating M. peregrinum as a causative agent.
Publication Type
Journal article.

<124>
Accession Number
20113267196
Author
Clayton, L. A.; Ritzman, T. K.
Title
Egg binding in a cockatiel (Nymphicus hollandicus). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):511-518.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
A 6-year-old cockatiel was diagnosed with egg binding based on clinical signs, physical examination findings, radiographs, and lack of oviposition. Medical management failed to induce oviposition, and surgical salpingotomy was used to remove the egg from the oviduct. Sterile egg yolk peritonitis was diagnosed based on histology. Postoperative management with leuprolide acetate and husbandry changes successfully prevented egg production for at least 2.5 months after the event.
Publication Type
Journal article.

<125>
Accession Number
20113267194
Author
Park, F.
Title
Vitamin A toxicosis in a lorikeet flock. (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):495-502.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Vitamin A toxicosis has recently been recognized as a concern for granivorous birds such as cockatiels (Nymphicus hollandicus) and nectarivorous birds such as lorikeets. Such birds have little exposure to preformed vitamin A in their wild diet, relying on carotene conversion to supply their vitamin A needs. Multiple clinical problems arose in a lorikeet flock when excessive vitamin A supplementation was used.
Publication Type
Journal article.

<126>
Accession Number
20113267193

Author
Gelis, S.; Gill, J. H.; Oldfield, T.; Jaensch, S. M.; Raidal, S. R.
Title
Mycobacteriosis in gang gang cockatoos (Callocephalon fimbriatum). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):487-494.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
This report presents three cases of mycobacteriosis in gang gang cockatoos (Callocephalon fimbriatum) that highlight the potential variation in clinical presentation of this important avian disease. The first case was a female gang gang cockatoo with widespread skeletal disease that presented with a chronic history of weight loss and nonpainful, bilaterally symmetric, distal-wing and leg nodular swellings. The second case was a mature female in good muscle condition with a nodular granulomatous pericarditis and myocarditis causing severe hydropericardium and cardiac tamponade; it was presented for respiratory distress. The third case was one of alimentary mycobacteriosis that presented with a chronic history of weight loss. Some difficulties associated with confirming a premortem diagnosis of mycobacteriosis are discussed.
Publication Type
Journal article.

<127>
Accession Number
20113267192
Author
Gelis, S.; Raidal, S. R.
Title
Microsporidiosis in a flock of tricolor parrot finches (Erythrura tricolor). (Special Issue: Case reports: the front line in exotic medicine.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(3):481-486.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
The lesions caused by a microsporidian infection in a flock of tricolor parrot finches (Erythrura tricolor) are described. Affected birds had a widespread nodular to diffuse granulomatous inflammation of the serosal surfaces of the gastrointestinal tract, peritoneum, perirenal airsacs and connective tissue, bone marrow, dura, and conjunctiva. This was composed predominantly of foamy macrophages containing numerous intracytoplasmic microsporidia measuring 1 to 2 micro m. Ultrastructural features consistent with microsporidia were the presence of a coiled polar filament and an electron-dense outer surface and thick electron-lucent capsule. Differential diagnoses included infection with intracellular organisms, including coccidian and other apicomplexan parasites, such as Isospora, Eimeria, and blood parasites; Chlamydophilosis; disseminated mycobacteriosis; and other bacterial and fungal species.
Publication Type
Journal article.

<128>
Accession Number
20113267189
Author
Johnson-Delaney, C. A.
Title
Common procedures in hedgehogs, prairie dogs, exotic rodents, and companion marsupials. (Special Issue: Common procedures.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2006. 9(2):415-435.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Nondomesticated species are commonly being kept as companion animals. These include the African pygmy hedgehog (Atelerix albiventris), the North American black-tailed prairie dog (Cynomys ludovicianus), and exotic rodents such as the degu (Octodon degus) and duprasi or fat-tailed gerbil (Pachyuromys duprasi). Common companion marsupials include the sugar glider (Petaurus breviceps), Bennett's or Tammar (Dama) wallabies (Macropus rufogriseus rufogriseus and Macropus eugenii, respectively), the Brazilian or South American gray short-tailed opossum (Monodelphis domestica), and the North American Virginia opossum (Didelphis virginiana). Although many of these animals are now bred domestically and are fairly docile when human-raised, they are essentially wild animals and hence have strong instincts to hide illness and pain.
Publication Type
Journal article.

<129>
Accession Number
20113294025
Author
Williams, J. G.; Graham, J. E.; Laste, N. J.; Malakoff, R. L.
Title
Tetralogy of Fallot in a young ferret (Mustela putorius furo). (Special Issue: Essentials of avian/exotic animal surgery.)
Source
Journal of Exotic Pet Medicine; 2011. 20(3):232-236. 34 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
A 17-month-old albino, castrated male domestic ferret (Mustela putorius furo) was presented for evaluation of a heart murmur. The murmur was first auscultated when the ferret was 12 weeks of age, coinciding with its first known evaluation by a veterinarian. At the time of diagnosis, the ferret was reported to have mild exercise intolerance. The clinical findings on the ferret were within normal limits other than a right parasternal systolic murmur (grade 4/6) that radiated to the left parasternal region. The ferret was not receiving any medications. All 4 features of tetralogy of Fallot (TOF) were identified with echocardiography. Thoracic radiographs were suggestive of TOF with mild right-sided enlargement of the cardiac silhouette and small pulmonary vasculature. A serum biochemistry profile and complete blood count were within the reference ranges for domestic ferrets. At that time atenolol (3.25 mg, every 24 hours, orally) was prescribed to treat the

clinical condition of the animal. At a 1-week follow-up examination, the patient's heart rate had decreased from 240-300 beats per minute to 180-260 beats per minute. The owner reported that the ferret was sleeping more frequently during the first week of therapy but had normal activity when awake. At a 5-month recheck examination, the patient was reported to be completely normal at home. This is the first case report of TOF in a ferret.
Publication Type
Journal article.

<130>
Accession Number
20113294024
Author
Martorell, J.; Vrabelova, D.; Reberte, L.; Ramis, A.
Title
Diagnosis of an abdominal splenosis in a case of ambulatory paraparesis of the hind limbs in a ferret (Mustela putorius furo). (Special Issue: Essentials of avian/exotic animal surgery.)
Source
Journal of Exotic Pet Medicine; 2011. 20(3):227-231. 21 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
A 2-year-old spayed female ferret (Mustela putorius furo) was presented with a 2-day history of ambulatory paraparesis of the hind limbs. On physical examination a mass was palpated in the cranial abdominal region, caudal to the stomach. A complete blood cell count revealed a normocytic normochromic anemia and reactive lymphocytes. A hypoechoic abdominal mass was observed during an ultrasound examination of the abdomen. An exploratory laparotomy was recommended and performed during which a pyramidal mass resembling a lobe of fatty liver tissue, plus omental torsion, was removed. The histopathologic diagnosis of the surgically removed mass was splenosis. The abdominal pain and ambulatory paraparesis resolved after surgery, which suggests that the paraparesis was due to pain. The findings in this report indicate that splenosis should be included as a differential diagnosis when a ferret presents with an abdominal mass and acute abdominal pain.
Publication Type
Journal article.

<131>
Accession Number
20113294023
Author
Steele, M. S.; Bennett, R. A.
Title
Clinical technique: dorsal ovariectomy in rodents. (Special Issue: Essentials of avian/exotic animal surgery.)
Source
Journal of Exotic Pet Medicine; 2011. 20(3):222-226. 8 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication

USA
Abstract
Dorsal ovariectomy is a quick and simple procedure to perform on rodent patients. This procedure can be used to both prevent and treat many common diseases of the female rodent reproductive tract. It has also been shown to prevent mammary and pituitary tumors in rats. Although this article describes how to perform a dorsal ovariectomy in rats, this procedure is applicable for use in other rodent species too.
Publication Type
Journal article.

<132>
Accession Number
20113294022
Author
Whittington, J. K.; Bennett, R. A.
Title
Clinical technique: myelography in rabbits. (Special Issue: Essentials of avian/exotic animal surgery.)
Source
Journal of Exotic Pet Medicine; 2011. 20(3):217-221. 8 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Spinal disease in rabbits is most often the result of trauma; however, other causes have been reported including congenital defects and degenerative spinal diseases. Diagnosis of spinal disease is based on history, physical and neurologic examination findings, and imaging. Fractures and luxations of the spine are often apparent on plain radiographs; however, myelography is used to determine if the lesion is causing spinal cord compression that may be amenable to surgical decompression. Unless intervertebral discs are mineralized, they are not visible when viewing plain radiographic images; therefore, myelography may be useful to diagnose spinal cord compression from a herniated disc. Myelography can also define lesions that do not result in a disruption of the osseous vertebral architecture such as tumors and granulomas. In rabbits, myelography is performed when the animal is under general anesthesia and in lateral recumbency. A nonionic iodinated contrast agent is injected into the subarachnoid space, usually at the level of the lumbar spine, to outline the spinal cord and identify cord compressive or disruptive lesions.
Publication Type
Journal article.

<133>
Accession Number
20113294021
Author
Beeber, N. L.
Title
Surgical management of adrenal tumors and insulinomas in ferrets. (Special Issue: Essentials of avian/exotic animal surgery.)
Source
Journal of Exotic Pet Medicine; 2011. 20(3):206-216. 14 ref.
Publisher
Elsevier
Location of Publisher

New York
Country of Publication
USA
Abstract
Domestic ferrets are popular pets and comprise a significant percentage of the caseload in many veterinary practices. This article describes the diagnosis and surgical techniques for treatment of 2 common endocrine disorders affecting ferrets, adrenal gland disease and pancreatic beta cell neoplasms. Although medical treatment options are used to reduce the severity of clinical signs associated with adrenal hyperplasia or neoplasia, surgical removal of the adrenal gland(s) is the treatment of choice. Clinical disease associated with pancreatic beta cell tumors includes hypoglycemia, and in many cases the tumor will metastasize early in the course of the disease. Although achieving a complete resolution of pancreatic beta cell neoplasia is unlikely, surgical removal of insulin-secreting tumors is recommended to temporarily alleviate the clinical syndrome and confirm the diagnosis.
Publication Type
Journal article.

<134>
Accession Number
20113294019
Author
Chow, E. P.
Title
Surgical management of rabbit ear disease. (Special Issue: Essentials of avian/exotic animal surgery.)
Source
Journal of Exotic Pet Medicine; 2011. 20(3):182-187. 22 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Clinical signs associated with otic disease in rabbits (Oryctolagus cuniculus) are very similar to those demonstrated in dogs and cats. The surgical treatment options to resolve diseases involving the rabbit ear are also comparable with those used for canine and feline species. However, there are key anatomic and physiologic differences that must be accounted for to perform proper surgical treatment on a rabbit that has been diagnosed with ear disease. This article describes the diagnostic and treatment options for otitis externa, otitis media, and otitis interna, with an emphasis on surgical procedures and the important distinctive otic features of the rabbit patient. The ventral bulla osteotomy procedure is recommended for management of otitis media in rabbits without otitis externa. In rabbits with pathology in the external ear canal and the middle ear, total ear canal ablation and lateral bulla osteotomy should be performed. This combined procedure will allow the surgeon to address pathology in both sites, with the ultimate goal of resolution of the underlying disease etiology. Lateral ear canal resection is only appropriate in rabbits with otitis externa without otitis media; however, this surgical procedure may not resolve the otitis externa. If this is a concern, a total ear canal ablation should be done because it offers a greater chance of success.
Publication Type
Journal article.

<135>
Accession Number
20113308199
Author

Pignon, C.; Mayer, J.
Title
Zoonoses of ferrets, hedgehogs, and sugar gliders. (Special Issue: Zoonoses, public health and the exotic animal practitioner.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2011. 14(3):533-549.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
With urbanization, people live in close proximity to their pets. People often share their living quarters and furniture, and this proximity carries a new potential for pathogen transmission. In addition to the change in lifestyle with our pets, new exotic pets are being introduced to the pet industry regularly. Often, we are unfamiliar with specific clinical signs of diseases in these new exotic pets or the routes of transmission of pathogens for the particular species. This article reviews zoonoses that occur naturally in ferrets, hedgehogs, and sugar gliders, discussing the occurrence and clinical symptoms of these diseases in humans.
Publication Type
Journal article.

<136>
Accession Number
20113308198
Author
Hill, W. A.; Brown, J. P.
Title
Zoonoses of rabbits and rodents. (Special Issue: Zoonoses, public health and the exotic animal practitioner.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2011. 14(3):519-531.
Publisher
Elsevier, Inc.,
Location of Publisher
New York
Country of Publication
USA
Abstract
Millions of households in the US own rabbits or rodents, including hamsters, guinea pigs, and gerbils. Activities such as hunting and camping also involve human interactions with wild rabbits and rodents. In many environments, feral rabbits and rodents live in close proximity to humans, domesticated animals, and other wildlife. Education of rodent and rabbit owners and individuals with occupational or recreational exposures to these species is paramount to reduce the prevalence of zoonoses associated with rabbit and rodent exposure.
Publication Type
Journal article.

<137>
Accession Number
20113355615
Author

Verneau, O.; Palacios, C.; Platt, T.; Alday, M.; Billard, E.; Allienne, J. F.; Basso, C.; Preez, L. H. du
Title
Invasive species threat: parasite phylogenetics reveals patterns and processes of host-switching between non-native and native captive freshwater turtles. (Special Issue: Systematics as a cornerstone of parasitology.)
Source
Parasitology; 2011. 138(13):1778-1792. many ref.
Publisher
Cambridge University Press
Location of Publisher
Cambridge
Country of Publication
UK
Abstract
One of the major threats to biodiversity involves biological invasions with direct consequences on the stability of ecosystems. In this context, the role of parasites is not negligible as it may enhance the success of invaders. The red-eared slider, Trachemys scripta elegans, has been globally considered among the worst invasive species. Since its introduction through the pet trade, T. s. elegans is now widespread and represents a threat for indigenous species. Because T. s. elegans coexists with Emys orbicularis and Mauremys leprosa in Europe, it has been suggested it may compete with the native turtle species and transmit pathogens. We examined parasite transfer from American captive to the two native species that co-exist in artificial pools of a Turtle Farm in France. As model parasite species we used platyhelminth worms of the family Polystomatidae (Monogenea) because polystomes have been described from American turtles in their native range. Phylogenetic relationships among polystomes parasitizing chelonian host species that are geographically widespread show patterns of diversification more complex than expected. Using DNA barcoding to identify species from adult and/or polystome eggs, several cases of host switching from exotic to indigenous individuals were illustrated, corroborating that parasite transmission is important when considering the pet trade and in reintroduction programmes to reinforce wild populations of indigenous species.
Publication Type
Journal article.

<138>
Accession Number
20103004839
Author
Beckmann, C.; Shine, R.
Title
Impact of invasive cane toads on Australian birds. (Special Section: New insights into the tropical biodiversity crisis.)
Source
Conservation Biology; 2009. 23(6):1544-1549. many ref.
Publisher
Blackwell Publishing
Location of Publisher
Boston
Country of Publication
USA
Abstract
The cane toad (Bufo marinus), a large, toxic, American anuran, was introduced to Australia in 1935. Populations of many of Australia's reptiles (snakes, varanid lizards, crocodiles) and carnivorous mammals (dasyurid marsupials) have declined because these predators are killed by the toad's powerful toxins. In contrast to these well-studied species, little is known about the cane toads impacts on Australian birds. We reviewed published and unpublished data on behavioral interactions between Australian avian predators and cane toads and collated distributional and dietary information to identify avian taxa potentially at risk from cane toad invasion. Cane toads are sympatric with 172 frog-eating bird species in Australia, and an

additional 8 bird species overlap with the predicted future range of the toad. Although many bird species thus are potentially at risk, behavioral observations suggest the risk level is generally low. Despite occasional reports of Australian birds being killed when they ingest cane toads, most birds either ignore toads or survive the predation event. The apparently higher tolerance of Australian birds to toad toxins, compared with Australian reptiles and marsupials, may reflect genetic exchange between Australian birds and Asian populations that encounter other bufonid species regularly and hence have evolved the capacity to recognize or tolerate this toxic prey.
Publication Type
Journal article.

<139>
Accession Number
20103045679
Author
Capua, I.; Terregino, C.; Castagnaro, M.
Title
Essential veterinary education in avian medicine: a global perspective. (Special Issue: Veterinary education for global animal and public health.)
Source
Revue Scientifique et Technique - Office International des Epizooties; 2009. 28(2):545-549. 7 ref.
Publisher
Office International des Epizooties
Location of Publisher
Paris
Country of Publication
France
Abstract
Avian medicine is a relatively recent discipline in the veterinary curriculum, and is definitely not considered a topical issue. However, in the face of a growing demand for poultry meat worldwide, and in view of the health issues surrounding wild, exotic and pet birds, the relevance of avian medicine should be acknowledged and taken into account when revising curricula.
Publication Type
Journal article.

<140>
Accession Number
20103231327
Author
Mitranescu, E.; Furnaris, F.; Tudor, L.; Simion, V.; Manascurta, S.; Mitranescu, D.; Gonciarov, M.
Title
Correlation between water physical chemical parameters and survival rate of Pterophillum scalare aquarium fish.
Source
Lucrari Stiintifice - Universitatea de Stiinte Agricole a Banatului Timisoara, Medicina Veterinara; 2010. 43(2):170-175. 8 ref.
Publisher
Facultatea de Medicina Veterinara
Location of Publisher
Timisoara
Country of Publication
Romania
Abstract

Nowadays, due to the housing restrictions generated by certain species, the aquarium became an alternative of transferring a part of nature to an urban habitat. This paper brings to the attention of those interested in exotic fish the issues caused by the water chemical features on Pterophillum scalare ornamental fish. In three tanks populated with scalares there have been used different concentrations of the following water quality parameters: hardness, dissolved oxygen, CO2, Mg, Ca, NH3, NO2-, NO3-, Fe, Cl, Cu. Water quality parameters have been assessed by using the Kit-Sera test and NOVA 60 spectrophotometer. For each water quality parameter taken into account, it has been established the fish' survival rate. Also, there has been followed fish' behavior related to the concentration of the assessed parameters. The study led to the conclusion that it should be paid a special attention in assessing aquarium water physical chemical parameters. Though distinctive, some quality parameters are interacting and are affecting each other. When one parameter changes, the others should be monitored in order to observe the dynamics. Certain quality parameters recording overvalues affect fish normal behavior. Pterophillum scalare fish' survival rate is in inverse ratio to the concentration of the quality water chemical parameters.
Publication Type
Journal article.

<141>
Accession Number
20103284625
Author
Pastoret, P. P.; Moutou, F.
Title
Special Issue: Invasive species. Part 2: concrete examples. (Special Issue: Invasive species. Part 2: concrete examples.)
Source
Revue Scientifique et Technique - Office International des Epizooties; 2010. 29(2):187-424.
Publisher
Office International des Epizooties
Location of Publisher
Paris
Country of Publication
France
Abstract
This special issue contains topics on the environmental impact, effect of invasive species (including mammals, birds, reptiles, fishes, helminths, arthropods and exotic pets) on biodiversity and disease transmission and controlling these invasive species.
Publication Type
Journal issue.

<142>
Accession Number
20103295626
Author
Fordham, M.; Rosenthal, K.; Durham, A.; Duda, L.; Komaromy, A. M.
Title
Intraocular osteosarcoma in an Umbrella Cockatoo (Cacatua alba). (Special Issue: Zoo and exotic animals.)
Source
Veterinary Ophthalmology; 2010. 13(s1):103-108. 33 ref.
Publisher
Blackwell Publishing Ltd
Location of Publisher
Oxford

Country of Publication
UK
Abstract
An adult, presumed intact female Umbrella Cockatoo (Cacatua alba), presented with acute hemorrhage from an intraocular mass that perforated through the right cornea. Computed tomography scanning revealed a large soft tissue mass in the right orbit, invading and displacing the globe laterally, and destroying the scleral ossicles. There was no evidence of bony changes of the orbit or extension of the mass into the optic nerve or brain. Exenteration and mass removal were performed, and osteosarcoma was diagnosed via histopathology. Radiotherapy was delivered with an orthovoltage unit to a total dose of 68 Gray delivered in 17 fractions over 6 weeks. The bird recovered well from treatment, but died 2 months after the last radiation session with neurological signs. Necropsy was not performed. To our knowledge, this is the first case of an intraocular osteosarcoma reported in a bird, and the first case of attempted treatment of osteosarcoma in a bird by a combination of surgery and radiation therapy.
Publication Type
Journal article.

<143>
Accession Number
20103295624
Author
Squarzoni, R.; Perlmann, E.; Antunes, A.; Milanelo, L.; Barros, P. S. de M.
Title
Ultrasonographic aspects and biometry of Striped owl's eyes (Rhinoptynx clamator). (Special Issue: Zoo and exotic animals.)
Source
Veterinary Ophthalmology; 2010. 13(s1):86-90. 29 ref.
Publisher
Blackwell Publishing Ltd
Location of Publisher
Oxford
Country of Publication
UK
Abstract
Objective: To report the biometric values and ultrasonographic aspects of the normal eye of the Striped owl (Rhinoptynx clamator). Sample population: Twenty-seven healthy, free-living, adult Striped owls from the Ecological Park of Tiete Veterinary Ambulatory (Sao Paulo, Brazil). Procedures: Both eyes of all owls underwent B-mode ultrasonographic examination and biometry was performed for lens axial length (WL), depth of the anterior (AC) and vitreous (VC) chambers, axial length of the globe (LB) and the pecten oculi (LP) of both eyes, using a 12 MHz probe. The owls were manually restrained without sedation and the eyes were topically anesthetized. Results: Biometric and statistical findings were as follows: in the left eye, the means and standard deviations were: LB=23.76+or-0.92 mm, WL=7.79+or-0.27 mm, AC=4.27+or-0.47 mm, VC=11.36+or-0.29 mm and LP=5.69+or-0.50 mm; in the right eye, the values were: LB=24.25+or-0.79 mm, WL=8.03+or-0.40 mm, AC=4.56+or-0.52 mm, VC=11.40+or-0.25 mm, and LP=5.68+or-0.41 mm. No significant differences were found between left and right eyes measurements of LB, WL, AC, VC, and LP dimensions. Conclusions: Ocular ultrasound aspects and biometric values of the Striped owl are reported. The study's results provide means for various ocular measurements. The ultrasound is an easy and safe exam to be performed in the Striped owl's eyes.
Publication Type
Journal article.

<144>
Accession Number

20103295623
Author
Reuter, A.; Muller, K.; Arndt, G.; Eule, J. C.
Title
Accuracy and reproducibility of the TonoVetReg. rebound tonometer in birds of prey. (Special Issue: Zoo and exotic animals.)
Source
Veterinary Ophthalmology; 2010. 13(s1):80-85. 24 ref.
Publisher
Blackwell Publishing Ltd
Location of Publisher
Oxford
Country of Publication
UK
Abstract
Objective: To examine the accuracy and reproducibility of intraocular pressure (IOP) measurements obtained by the TonoVetReg. rebound tonometer. Animals studied: Freshly enucleated healthy eyes of 44 free-ranging birds of prey out of the species Haliaeetus albicilla, Accipiter gentilis, Accipiter nisus, Buteo buteo, Falco tinnunculus, Strix aluco, Asio otus and Tyto alba euthanized because of unrelated health problems. Procedures: IOP readings from the TonoVetReg. were compared with a manometric device, with IOP being set from 5 to 100 mmHg in steps of 5 mmHg by adjusting the height of a NaCl solution reservoir connected to the eye. Reproducibility of the TonoVetReg. readings was determined by repeated measurements. Results: TonoVetReg. and manometer values showed a strong linear correlation. In the Accipitridae, the TonoVetReg. tended to increasingly overestimate IOP with increasing pressure, while in the other families, it increasingly underestimated it. In the Sparrowhawk, the values almost represent the ideal line. Reproducibility of TonoVetReg. values decreases with increasing pressure in the clinically important range from 5 to 60 mmHg. Conclusion: IOP values measured with the TonoVetReg. demonstrated species specific deviation from the manometric measurements. These differences should be considered when interpreting IOP values. Using the regression formulae presented, corrected IOP values could be calculated in a clinical setting.
Publication Type
Journal article.

<145>
Accession Number
20103295621
Author
Williams, D.; Sullivan, A.
Title
Ocular disease in the guinea pig (Cavia porcellus): a survey of 1000 animals. (Special Issue: Zoo and exotic animals.)
Source
Veterinary Ophthalmology; 2010. 13(s1):54-62. 35 ref.
Publisher
Blackwell Publishing Ltd
Location of Publisher
Oxford
Country of Publication
UK
Abstract
Objective: Anecdotal evidence has suggested that guinea pigs have a high prevalence of ocular lesions. Here we undertook a survey of 1000 guinea pigs from populations of animals kept as laboratory animals, breeding show cavies, animals kept as pets and those from rescue and rehoming centers. Each animal was examined to assess for ocular abnormalities. Procedures: A full ophthalmic examination was performed on each animal with direct and indirect ophthalmoscopy and with slit lamp biomicroscopy. Measurement of tear production using the Schirmer tear test 1 and intraocular pressure using the Tonopen applanation tonometer

after topical anesthesia was undertaken in selected animals. Results: Forty-five percent of animals examined had some ocular abnormality. The majority were lens lesions including 17% with cataract and 21% with subclinical lens abnormalities such as nuclear sclerosis. Other abnormalities included conjunctivitis in 4.7% and keratitis in 3.6%. Lipid deposition in conjunctiva was observed in 2.3% of guinea pigs and ciliary body heterotopic bone formation in 0.8% of animals. Conclusions: This study shows a high proportion of eyes with some degree of abnormality in animals otherwise considered healthy. Information on diseases of the guinea pig eye is important given the use of the species as a laboratory rodent and also the number kept as pets and show animals.
Publication Type
Journal article.

<146>
Accession Number
20103295618
Author
Lehmkuhl, R. C.; Almeida, M. F.; Mamprim, M. J.; Vulcano, L. C.
Title
B-mode ultrasonography biometry of the Amazon Parrot (Amazona aestiva) eye. (Special Issue: Zoo and exotic animals.)
Source
Veterinary Ophthalmology; 2010. 13(s1):26-28. 11 ref.
Publisher
Blackwell Publishing Ltd
Location of Publisher
Oxford
Country of Publication
UK
Abstract
Purpose: Ultrasonographic evaluation of the eye is a relatively recent addition to routine ophthalmic diagnostics in small animal ophthalmology. Some parameters for ophthalmic biometry have been established. There are few studies in clinical avian ophthalmology that describe ultrasound images of eye in some nocturnal avian species and in other birds that do not belong to the Brazilian fauna, but the psittacine family is not represented. The purpose of this study was to describe the following measurements: the distances between cornea and anterior lens capsule (D1) between the anterior and posterior lens capsule (D2), between posterior lens capsule and optic papilla (D3) and the axial length. Method: Sixty four transpalpebral ocular ultrasound examinations were performed on 32 Blue fronted Amazon parrots (Amazona aestiva) with no history of previous ophthalmic disease. Result and Discussion: The measurements were taken in sagital planes using a 10 MHz linear probe without a standoff pad. The mean values for the left eye were; D1 0.17+or-0.03 cm, D2 0.35+or-0.02 cm, D3 0.73+or-0.04 cm and the axial length 1.26+or-0.06 cm. In the right eye D1 0.17+or-0.02 cm, D2 0.34+or-0.02 cm, D3 0.74+or-0.03 cm and the axial length 1.25+or-0.05 cm. No significant statistical difference was observed among the birds or between the left and right eye. The description of these parameters will allow the veterinary practitioner to evaluate the structural changes that specific diseases may cause in these animals.
Publication Type
Journal article.

<147>
Accession Number
20103295617
Author
Lima, L.; Montiani-Ferreira, F.; Tramontin, M.; Santos, L. L. dos; Machado, M.; Lange, R. R.; Russ, H. H. A.
Title

The chinchilla eye: morphologic observations, echobiometric findings and reference values for selected ophthalmic diagnostic tests. (Special Issue: Zoo and exotic animals.)
Source
Veterinary Ophthalmology; 2010. 13(s1):14-25. 73 ref.
Publisher
Blackwell Publishing Ltd
Location of Publisher
Oxford
Country of Publication
UK
Abstract
Purpose: To carry out a descriptive investigation into the most relevant morphological features of the chinchilla eye and bony orbit, as well as to perform selected ophthalmic diagnostic tests with the aim of establishing normal anatomic and physiologic references for this species. Method: A total of 57 healthy, chinchillas were used to test most of the parameters in this investigation. Besides morphologic observations of the globe and adnexa, selected ocular tests and parameters were investigated, including blink frequency, palpebral fissure length (PFL), Schirmer tear test (STT), esthesiometry, intraocular pressure (IOP), central corneal thickness (CCT), B-mode echobiometric measurements of the globe and culture of the normal conjunctival bacterial microbiota. Morphologic observations were made using six formalin-fixed globes and four macerated skulls. Results and Discussion: Normal parameters found for selected ocular diagnostic tests were: blink frequency: 2.6+or-0.84 blinks per 10 min; STT: 1.07+or-0.54 mm; esthesiometry: 1.24+or-0.46 cm; IOP: 17.71+or-4.17 mmHg; CCT: 0.34+or-0.03 mm; PFL: 1.44+or-0.11 cm; anterior chamber depth: 2.01+or-0.2 mm; axial lens thickness: 5.49+or-0.43 mm; vitreous chamber depth (internal): 3.69+or-0.52 mm; axial globe length: 1.14+or-0.07 cm. The most frequent bacteria isolated from the conjunctiva were Streptococcus sp. (27.45%), Staphylococcus aureus (23.52%) and coagulase-negative Staphylococcus (19.60%). No statistically significant differences between left or right eyes or genders were found for any of the results. Reference data and morphologic observations obtained in this investigation will help veterinary ophthalmologists to recognize unique morphological features and more accurately diagnose ocular diseases in the chinchilla, an animal already being used as a biological model for ophthalmic studies.
Publication Type
Journal article.

<148>
Accession Number
20103295514
Author
Muller, K.; Mauler, D. A.; Eule, J. C.
Title
Reference values for selected ophthalmic diagnostic tests and clinical characteristics of chinchilla eyes (Chinchilla lanigera). (Special Issue: Zoo and exotic animals.)
Source
Veterinary Ophthalmology; 2010. 13(s1):29-34. 28 ref.
Publisher
Blackwell Publishing Ltd
Location of Publisher
Oxford
Country of Publication
UK
Abstract
Objective: To establish reference values for the Schirmer tear test I (STT I), the phenol red thread tear test (PRTT), the intraocular pressure (IOP) with rebound tonometry, to determine the corneal sensitivity for healthy chinchillas, and to describe clinical aspects of normal chinchilla eyes. Animals: One hundred and twenty-two eyes of 61 healthy pet chinchillas of different age and gender were investigated. Procedures: A full ophthalmic exam including slit lamp biomicroscopy, ophthalmoscopy, measurement of STT I, PRTT, determination of the corneal touch threshold (CTT), and the measurement of the IOP (TonoVetReg.) was performed. The normal appearance of the lid, the iris, the lens, the fundus, and the optic nerve disc was

evaluated. Results: The results of the STT I were very low and not reliable, and the measurement was discontinued. The median value of PRTT was 14.0 mm wetting/15 s (mean 14.6+or-3.5 mm wetting/15 s). The median CTT was 32.5 mm (mean 31.2+or-7.0 mm) respectively 1.2 g/mm2 (mean 1.5+or-0.9 g/mm2). The median IOP was 3.0 mmHg (mean 2.9+or-1.8 mmHg). The predominating iris color was brown. The fundus pigmentation varied. Few lens alteration were seen in otherwise healthy chinchilla eyes. Most chinchillas had myelinated discs. Optic nerve cupping was present in 62% of the animals. Conclusion: Because of the small amount of tears, the PRT test is recommended for tear measurements in chinchillas. The IOP in chinchillas seems to be quiet is low in comparison to other rodents.
Publication Type
Journal article.

<149>
Accession Number
20103295510
Author
Bartlett, S. L.; Peters, R. M.; Lombardino, I. M.; Bowser, P. R.
Title
Bilateral intraocular malignant neuroectodermal tumors in a telescope goldfish (Carassius auratus). (Special Issue: Zoo and exotic animals.)
Source
Veterinary Ophthalmology; 2010. 13(s1):3-8. 38 ref.
Publisher
Blackwell Publishing Ltd
Location of Publisher
Oxford
Country of Publication
UK
Abstract
A 5-year-old male telescope goldfish (Carassius auratus) developed buphthalmia of the left eye. An enucleation was performed and a diagnosis of a neuroectodermal tumor was made on histological examination. Although the fish initially recovered, it was killed 49 days postsurgery due to a severe decline in its condition. On histological evaluation of postmortem tissue samples, it was determined that the fish also had a neuroectodermal tumor of the right eye with local invasion of the brain. On immunohistochemistry, the neoplastic cells were positive for S-100. To the authors' knowledge, this is the first published case of naturally occurring bilateral intraocular neuroectodermal tumors in a fish.
Publication Type
Journal article.

<150>
Accession Number
20103295263
Author
Barsotti, G.; Briganti, A.; Spratte, J. R.; Ceccherelli, R.; Breghi, G.
Title
Mydriatic effect of topically applied rocuronium bromide in tawny owls (Strix aluco): comparison between two protocols. (Special Issue: Zoo and exotic animals.)
Source
Veterinary Ophthalmology; 2010. 13(s1):9-13. 15 ref.
Publisher
Blackwell Publishing Ltd
Location of Publisher
Oxford

Country of Publication
UK
Abstract
Objective: To evaluate the mydriatic efficacy of a neuromuscular blocking agent (rocuronium bromide) applied topically to only one eye of nocturnal birds of prey and to assess for any general and/or local adverse effects due to its use. Animal studied: Twelve healthy adult tawny owls (Strix aluco) were randomly divided in two groups. Procedures: Six birds (Group 1) received a single dose of 0.35 mg of rocuronium bromide. The second group of subjects (Group 2) received two doses of 0.35 mg of rocuronium bromide (total 0.70 mg/eye). In both groups, the curariform agent was instilled topically. Pupil diameter was measured with a pupillary gauge in 10 min intervals for a total of 100 min and then every 20 min for a total of 240 min. The assessment of the pupillary light reflex was performed using a standard light source during pupillary size recording. Results: Maximal pupillary diameter was 11.5+or-0.3 mm for Group 1 and 11.0+or-0.6 mm for Group 2 and no statistically significant differences were detected among the two groups. The maximal pupillary diameter was achieved at T80 for Group 1, and at T60 for Group 2. A complete fundus examination was possible on all treated eyes of subjects of both groups. The drug did not cause any noticeable adverse effects in any of the examined birds. Conclusion: Results of the present study suggest that a single topical administration of 0.35 mg of rocuronium bromide to the eyes of healthy tawny owls results in sufficient mydriasis to allow for a complete examination of the fundus.
Publication Type
Journal article.

<151>
Accession Number
20103367785
Author
Barron, H. W.; McBride, M.; Martinez-Jimenez, D.; Foutz, T.; Divers, S.; Budsberg, S.
Title
Comparison of two methods of long bone fracture repair in rabbits. (Special Issue: Cutting edge avian/exotic medicine and surgery.)
Source
Journal of Exotic Pet Medicine; 2010. 19(2):183-188. 12 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Two different methods of rabbit femoral fracture repair were evaluated: (1) stainless-steel surgical plate and bone screws; and (2) placement of an intramedullary pin and an external skeletal fixator device. On average, bones repaired with the bone plate method withstood 35.1 lb/47.6 N (range, 14.4-63.0 lb/19.5-85.4 N) of compressive and bending forces before failure occurred. Bones repaired with intramedullary pin and external skeletal fixator device method withstood an average of 67.7 lb/91.8 N (range, 48.7-94.8 lb/66.0-128.5 N) of compressive and bending forces before failure, but the bone was more likely to shatter during implant application. Normal rabbit femurs placed in the control group were able to withstand an average of 148.4 lb/201.2 N (range, 100.0-192.0 lb/135.6-260.3 N). The fragility of rabbit bones made testing of any implant viability problematic. This study demonstrates advantages and disadvantages to each method of fixation in rabbits and compares important differences in application of fracture repair implants with those of other domestic species.
Publication Type
Journal article.

<152>
Accession Number
20103367784
Author
DeCubellis, J.; Kruse, A. M.; McCarthy, R. J.; Zacher, L. A.; Penninck, D.; Watson, A. T.; Parry, N.; Donnelly, T. M.; Mayer, J.
Title
Biliary cystadenoma in a rabbit (Oryctolagus cuniculus). (Special Issue: Cutting edge avian/exotic medicine and surgery.)
Source
Journal of Exotic Pet Medicine; 2010. 19(2):177-182. 22 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Biliary tumors are rarely diagnosed in rabbits, and there are very few published case reports of this disease within this group of animals. This case involves an approximately 6-year-old spayed female pet rabbit that was referred for an abdominal mass noted on survey full-body radiographs obtained during an examination after presenting for acute onset anorexia. Otherwise, the patient had an unremarkable history, and physical examination abnormalities were limited to a slightly distended abdomen. Laboratory evaluation revealed an isolated elevation in gamma-glutamyl transpeptidase. Ultrasonography documented a 5.4-cm multicystic, intrahepatic mass with hyperechoic septations. The mass was surgically resected and described histopathologically as a proliferation of ectatic duct structures with a simple epithelial lining, supporting a diagnosis of biliary cystadenoma. The rabbit recovered without incident and was doing well 15 months postsurgery. The case is presented with a review of all reported cases and discussion of the potential origins of this unusual tumor in the rabbit. Surgery is recommended in rabbits that are diagnosed with a biliary tumor.
Publication Type
Journal article.

<153>
Accession Number
20103367783
Author
Franco, K. H.; Hoover, J. P.; Backues, K. A.; Payton, M. E.
Title
Comparison of biochemical values of paired serum and plasma samples from American Flamingos (Phoenicopterus ruber), Indian runner ducks (Anas platyrhynchos), and Hyacinth Macaws (Anodorhynchus hyacinthinus). (Special Issue: Cutting edge avian/exotic medicine and surgery.)
Source
Journal of Exotic Pet Medicine; 2010. 19(2):169-176. 15 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Single blood samples from 8 clinically normal adult Indian runner ducks (Anas platyrhynchos), 8 clinically normal American flamingos (Phoenicopterus ruber), and 3 blood samples from each of 4 clinically normal hyacinth macaws (Anodorhynchus hyacinthinus) were collected to compare the biochemical values of paired plasma samples from heparinized blood with those of serum samples from clotted blood. Small but significant differences ($P<0.05$) were found between paired serum and plasma samples for some

biochemistries. In flamingos, potassium (P=0.001), albumin (P=0.03), and alanine aminotransferase (P=0.02) were significantly higher in serum compared with plasma, whereas total protein (P=0.04) and globulin (P=0.01) were significantly lower in serum compared with plasma. In Indian runner ducks, potassium (P=0.0002), chloride (P=0.02), and alanine aminotransferase (P=0.0005) were significantly higher in serum compared with plasma, whereas total CO2 (P=0.02) and globulin (P=0.007) were significantly lower in serum compared with plasma. Serum total protein was lower than plasma levels, but it was not significant (P=0.05). In hyacinth macaws, total protein (P=0.02) and the albumin:globulin ratio (P=0.02) were significantly lower in serum compared with plasma. Although statistically significant, these differences were small and appear unlikely to be of any clinical relevance. There is minimal loss of plasma volume from heparinized blood samples compared with serum volume from clotted blood samples. This allows collection of smaller blood volumes from small or sick birds in a single lithium heparin anticoagulant tube to perform a hemogram on whole blood and a biochemical profile on the separated plasma that provides values similar to those of serum.
Publication Type
Journal article.

<154>
Accession Number
20103367781
Author
Heatley, J. J.; Russell, K. E.
Title
Box turtle (Terrapene spp.) hematology. (Special Issue: Cutting edge avian/exotic medicine and surgery.)
Source
Journal of Exotic Pet Medicine; 2010. 19(2):160-164. 7 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Box turtles (Terrapene spp.) maintained as pet animals are commonly presented to the veterinary clinic for health care. A complete blood count (CBC) is recommended for box turtle patients as part of the annual physical examination, when they are ill, and before owner-induced brumation. Box turtles from the wild also are commonly presented for injuries and illness, including vehicular trauma, bot fly infestation, and predator attack. The initial health assessment of a wild turtle patient may be enhanced by evaluating the results of a CBC. This article will review venipuncture sites and hematologic techniques for obtaining blood samples to submit for a CBC, as well as give comments on interpreting CBC results in box turtles based on author experience and literature review. Hopefully, this article will promote further exploration and publication relevant to the evaluation of box turtle hematology.
Publication Type
Journal article.

<155>
Accession Number
20103367779
Author
Ford, S.
Title
Raptor gastroenterology. (Special Issue: Cutting edge avian/exotic medicine and surgery.)
Source

Journal of Exotic Pet Medicine; 2010. 19(2):140-150. 59 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Birds of prey have developed talons, a hooked beak, and a tongue and oral cavity replete with pronounced hooks and papillae for prehending large boluses of food. The size of the proventriculus in relation to the ventriculus and weak musculature of the ventriculus, combined with an extremely acidic luminal pH, are consistent with a gastric digestive physiology maximized for protein digestion. The pyloric sphincter retains indigestible matter in the stomach, which is later compressed into a pellet and egested. The ventriculus, pylorus, pancreas, and an elongated duodenum coordinate to maximize neutralization of acidic peptic juices and increase the efficiency of digestion and absorption. Raptors are susceptible to a variety of infectious and noninfectious diseases that affect the digestive tract. Diagnostic testing and treatment recommendations for raptor intestinal disease conditions are discussed in this article.
Publication Type
Journal article.

<156>
Accession Number
20103367778
Author
Hoppes, S.; Gray, P.
Title
Parrot rescue organizations and sanctuaries: a growing presence in 2010. (Special Issue: Cutting edge avian/exotic medicine and surgery.)
Source
Journal of Exotic Pet Medicine; 2010. 19(2):133-139. 23 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Parrots are amazing creatures. They are beautiful, intelligent, and entertaining. Many psittacine species have the ability to mimic speech and sound, thereby making them a desirable animal to own. People may obtain parrots, believing they are easy to care for because they live in a relatively small cage. In reality, these birds are loud, messy, destructive, live long lives, and need a great deal of attention. On occasion, new parrot owners quickly realize that a bird is not a good choice for a pet. This buyer regret may lead the bird owner to sell or give the bird away; consequently, these parrots may end up in the care of rescue or sanctuary organizations. This article discusses the advantages and disadvantages of rescue and sanctuary organizations and the need to establish guidelines for the welfare of parrots maintained at these facilities.
Publication Type
Journal article.

<157>
Accession Number
20093033891
Author

Harkewicz, K.
Title
Tomato frog (Dyscophus sp.). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):40-42. 4 ref.
Publisher
Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, behaviour, reproduction, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of tomato frogs (Dyscophus spp.).
Publication Type
Journal article.

<158>
Accession Number
20093033890
Author
Maclean, B.
Title
African clawed frog (Xenopus laevis). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):37-39. 6 ref.
Publisher
Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, behaviour, reproduction, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of African clawed frogs (Xenopus laevis).
Publication Type
Journal article.

<159>
Accession Number
20093033889
Author
Martinho, F.
Title
Milk snake (Lampropeltis triangulum). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):35-36. 3 ref.
Publisher

Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, behaviour, reproduction, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of milk snakes (Lampropeltis triangulum).
Publication Type
Journal article.

<160>
Accession Number
20093033888
Author
Martinho, F.
Title
Spiny softshell turtle (Apalone spinifera, formerly Trionyx siniferus). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):33-34. 4 ref.
Publisher
Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, behaviour, reproduction, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of spiny softshell turtles (Apalone spinifera).
Publication Type
Journal article.

<161>
Accession Number
20093033887
Author
Franklin, J. M.
Title
Leopard tortoise (Geochelone pardalis). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):31-32. 4 ref.
Publisher
Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract

This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, behaviour, reproduction, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of leopard tortoises (Geochelone pardalis).
Publication Type
Journal article.

<162>
Accession Number
20093033886
Author
Periat, J. M.
Title
Tegu (Tupinambis sp.). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):29-30. 6 ref.
Publisher
Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, behaviour, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of tegus (Tupinambis spp.).
Publication Type
Journal article.

<163>
Accession Number
20093033885
Author
Harkewicz, K.
Title
Solomon Island prehensile-tailed skink (Corucia zebrata). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):26-28. 5 ref.
Publisher
Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, behaviour, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of Solomon Island prehensile-tailed skinks (Corucia zebrata).
Publication Type
Journal article.

<164>
Accession Number
20093033884
Author
Weber, N.
Title
Savannah and white-throated monitor lizards (Varanus sp.). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):24-25. 6 ref.
Publisher
Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, behaviour, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of savannah (Varanus exanthematicus) and white-throated (V. albigularis albigularis) monitor lizards.
Publication Type
Journal article.

<165>
Accession Number
20093033883
Author
Buono, M.
Title
African fat-tailed gecko (Hemitheconyx caudicinctus). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):22-23. 2 ref.
Publisher
Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, behaviour, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of African fat-tailed geckos (Hemitheconyx caudicinctus).
Publication Type
Journal article.

<166>
Accession Number
20093033882
Author

Periat, J. M.
Title
Frilled lizard (Chlamydosaurus kingii). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):20-21. 5 ref.
Publisher
Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, behaviour, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of frilled lizards (Chlamydosaurus kingii).
Publication Type
Journal article.

<167>
Accession Number
20093033878
Author
Jekl, V.
Title
African naked mole rat (Heterocephalus glaber). (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):11-12. 5 ref.
Publisher
Zoological Education Network
Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This article describes the origin, habitat, pet suitability, morphology, characteristics, feeding, reproduction, behaviour, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of African naked mole rats (Heterocephalus glaber).
Publication Type
Journal article.

<168>
Accession Number
20093033877
Title
Special Annual Issue: Quick reference guide to selected exotic species. (Special Annual Issue: Quick reference guide to selected exotic species.)
Source
Exotic DVM; 2008. 10(4):45 pp.
Publisher
Zoological Education Network

Location of Publisher
Lake Worth
Country of Publication
USA
Abstract
This issue contains information on the origin, habitat, pet suitability, morphology, characteristics, feeding, reproduction, behaviour, housing, restraint, anaesthesia, diseases, zoonotic potential and husbandry of selected exotic pets, including ocelots (Leopardus pardalis), shrews (Sorex araneus), African naked mole rats (Heterocephalus glaber), American crows (Corvus brachyrhynchos), Japanese quails (Coturnix coturnix japonica), mandarin ducks (Aix galericulata), frilled lizards (Chlamydosaurus kingii), African fat-tailed geckos (Hemitheconyx caudicinctus), savannah monitors (Varanus exanthematicus), white-throated monitors (V. albigularis albigularis), Solomon Island prehensile-tailed skinks (Corucia zebrata), tegus (Tupinambis sp.), leopard tortoises (Geochelone pardalis), spiny shoftshell turtles (Apalone spinifera), milk snakes (Lampropeltis triangulum), African clawed frogs (Xenopus laevis), tomato frogs (Dyscophus sp.) and emperor scorpions (Pandinus imperator).
Publication Type
Journal issue.

<169>
Accession Number
20093079650
Author
Cussac, V. E.; Fernandez, D. A.; Gomez, S. E.; Lopez, H. L.
Title
Fishes of southern South America: a story driven by temperature. (Special Issue: Fish research in Latin America: basic and applied.)
Source
Fish Physiology and Biochemistry; 2009. 35(1):29-42. many ref.
Publisher
Springer Science + Business Media
Location of Publisher
Dordrecht
Country of Publication
Netherlands
Abstract
The latitudinal extension of southern South America imposes a thermal gradient that affects the structure of marine and freshwater fish assemblages and the biology of the species through direct exposure to the temperature gradients or by means of a web of historical and ecological relationships. We have reviewed biological and ecological data of marine and freshwater fishes from the southern Neotropics, including Patagonia, and report several examples of dependence on temperature, from glacial times to today's climate change. We were able to identify historic and present effects on the diversity of fish assemblages, isolation, southern limits for the distribution of species, and morphological variation among populations. There is a wide range of characteristics that exemplify an adaptation to low temperatures, including biochemical peculiarities, physiological adjustments, and alternative life history patterns, and these appear in both freshwater and marine, and native and exotic fishes. The consequences of stable temperature regimes in both the ocean and thermal streams deserve special mention as these shape specialists under conditions of low selective pressure. At present, habitat use and interactions among species are being subject to changes as consequences of water temperature, and some of these are already evident in the northern and southern hemispheres.
Publication Type
Journal article.

<170>
Accession Number
20093109259
Author
Heatley, J. J.
Title
Cardiovascular anatomy, physiology, and disease of rodents and small exotic mammals. (Special Issue: Cardiology)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2009. 12(1):99-113. 80 ref.
Publisher
W.B. Saunders
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
Cardiovascular disease in small exotic mammals is anecdotally common, but clinical reports of diagnosis and treatment of disease are rare. This article focuses on known causes of cardiovascular disease in the small exotic mammal. Normal anatomy and physiology, as it differs from the dog and cat, is also highlighted. Cardiomyopathy, dirofilariasis, atrial thrombosis, and other acquired and congenital cardiac and vascular diseases of rodents, hedgehogs, sugar gliders, raccoons, opossums, and skunks are reviewed. Expected clinical signs and diagnostic and treatment options, including a formulary, are provided for these species.
Publication Type
Journal article.

<171>
Accession Number
20093140518
Author
Gong ShiPing; Chow, A. T.; Fong, J. J.; Shi HaiTao
Title
The chelonian trade in the largest pet market in China: scale, scope and impact on turtle conservation. (Special Issue: Conservation in China.)
Source
Oryx; 2009. 43(2):213-216. 26 ref.
Publisher
Cambridge University Press
Location of Publisher
Cambridge
Country of Publication
UK
Abstract
China is the largest consumer of turtles in the world and international trade has been cited as the greatest threat to Asian turtles. Two main types of trade in live turtles occur in China: for food and traditional Chinese medicine, and for pets, including those for release by Buddhists. The food trade involves the largest quantities of turtles. In recent years, however, the international pet turtle trade has increased dramatically. Yuehe Pet Market in Guangzhou is the largest pet market in China, selling live chelonians and other animals. To understand the potential impacts of the pet trade on chelonians we conducted seven surveys in Yuehe Pet Market from August 2006 to March 2008. Over 39,000 individual chelonians of 61 species were recorded (19.1% of the global total of 319 species). Fifteen (24.6%) of these species are native to China and 46 (75.4%) are native to other countries. Two are designated as grade II key state-protected species in China. Thirty-eight (62.3%) are CITES listed species (four in CITES Appendix I, 26 in CITES II and eight in CITES III). Four are categorized on the IUCN Red List as Critically Endangered, 16 as Endangered and 19 as Vulnerable. Our surveys indicate that increasing demand and the illegal international pet trade could be

having a severe impact on chelonian conservation, and we make recommendations for law enforcement and conservation.
Publication Type
Journal article.

<172>
Accession Number
20093149237
Author
Jellyman, D.
Title
A review of radio and acoustic telemetry studies of freshwater fish in New Zealand. (Special Issue: Tagging for telemetry of freshwater fauna.)
Source
Marine and Freshwater Research; 2009. 60(4):321-327. many ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
Radio and acoustic telemetry have been used in 24 studies of freshwater fish in New Zealand. Although most native species are too small to carry these tags, studies using telemetry have been carried out on four of the larger species, i.e. lampreys (Geotria australis), shortfin and longfin eels (Anguilla australis and A. dieffenbachii) and giant kokopu (Galaxias argenteus). Among the introduced species, telemetry has been used to study movements of brown and rainbow trout (Salmo trutta and Oncorhynchus mykiss) in both rivers and lakes, chinook salmon (Oncorhynchus tshawytscha), koi carp (Cyprinus carpio) and bullhead catfish (Ameiurus nebulosus). To date, studies have almost exclusively been of short-term movements and seasonal migrations. Study objectives range from measuring microhabitats and home ranges to determining the extent of seasonal spawning migrations. The advent of progressively smaller tags will provide increased opportunities to use this technology on a wider range of fish species. Management implications of several studies are presented. Although biotelemetry studies have not yet been used in New Zealand, there are considerable opportunities for using such technology to increase understanding of fish energetics and also stress associated with catch-and-release practices in recreational fishing.
Publication Type
Journal article.

<173>
Accession Number
20093204989
Author
Bonn, W. van
Title
Clinical technique: extra-articular surgical stifle stabilization of an American Bullfrog (Rana catesbeiana). (Special Issue: Amphibians.)
Source
Journal of Exotic Pet Medicine; 2009. 18(1):36-39. 14 ref.
Publisher
Elsevier
Location of Publisher
New York

Country of Publication
USA
Abstract
Reports of orthopedic surgical procedures in anuran (frogs and toads) patients are rare. The plight of many anuran populations and the increased role of clinical veterinarians in aquatic conservation, zoological, and biomedical research management will result in more frogs and toads being cared for as individuals to include orthopedic surgical support. The technique described in this article was used to successfully correct an acute, presumed traumatic, stifle instability in a wild-caught American Bullfrog (Rana catesbeiana) and is shared to encourage clinicians to further adapt surgical techniques when caring for these important animals.
Publication Type
Journal article.

<174>
Accession Number
20093204986
Author
Pessier, A. P.
Title
Edematous frogs, urinary tract disease, and disorders of fluid balance in Amphibians. (Special Issue: Amphibians.)
Source
Journal of Exotic Pet Medicine; 2009. 18(1):4-13. 59 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Renal disease and disorders of fluid homeostasis are common in captive amphibians. Veterinarians treating amphibian patients should be aware of important physiological differences between Amphibia and other vertebrates encountered in the exotic animal veterinary practice. Of particular clinical importance are the role of the integument in osmoregulation and the diversity of physiological adaptations that enables the Amphibia to inhabit a variety of natural environments. This article reviews physiological concepts and provides an overview of common disorders of the amphibian urinary tract and fluid balance, including the common clinical presentation of subcutaneous (lymph sac) edema in anurans (frogs and toads).
Publication Type
Journal article.

<175>
Accession Number
20093245671
Author
Joslin, J. O.
Title
Blood collection techniques in exotic small mammals. (Special Issue: Hematology.)
Source
Journal of Exotic Pet Medicine; 2009. 18(2):117-139. 49 ref.
Publisher
Elsevier
Location of Publisher
New York

Country of Publication
USA
Abstract
Blood collection from small exotic pocket pets can be difficult to achieve. The individual collecting the blood must know both the anatomy and behavior of the species to obtain suitable amounts of blood for diagnostic testing. Given the animals' small size, it is often difficult to collect large volumes of blood. A clinician serious in developing an exotic small mammal practice should understand the limitations of blood sample collection and the risks involved with the procedure. Unlike domestic animals, these pets are often not comfortable with being handled and are often prone to induced complications when presented to a veterinary clinic and restrained for examination. For some cases, the clinician will have to determine if the risk of getting the sample is better achieved by anesthetizing the patient, and if doing so will have a detrimental effect on the animal. One will also need to consider the effect of the anesthetic versus the stress the restraint may have on the blood results.
Publication Type
Journal issue.

<176>
Accession Number
20093339692
Author
Mayer, J.
Title
Evidence-based medicine in small mammals. (Special Issue: Topics in Medicine and Surgery: Evidence and Problem Solving.)
Source
Journal of Exotic Pet Medicine; 2009. 18(3):213-219. 6 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Evidence-based medicine in small exotic mammals is often considered challenging because of a lack of information related to reference data, validated diagnostic tests, treatment outcome, side effects, long-term prognosis, and financial constraints of the owner. However, despite this lack of information, it is still possible to provide good medical care to small exotic mammals and confirm a disease diagnosis that can be properly treated. With many small exotic mammal cases, the condition of the animal and, ultimately, the disease diagnosis, may not be familiar to the attending veterinarian, and in some cases the disease itself may not have ever been described in that species in the scientific literature. This article describes the process of diagnosing hyperthyroidism in a guinea pig using a recommended patient assessment, diagnostic, and treatment protocol.
Publication Type
Journal article.

<177>
Accession Number
20093339691
Author
Gibbons, P. M.; Tell, L. A.
Title

Problem solving in reptile practice. (Special Issue: Topics in Medicine and Surgery: Evidence and Problem Solving.)
Source
Journal of Exotic Pet Medicine; 2009. 18(3):202-212. 25 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Problem-oriented reptile medicine is an explicit, definable process focused on the identification and resolution of a patient's problems. This approach includes gathering case information, clearly defining the problems, making plans to address each problem, and following up with the case over time. Case information and published literature serve as evidence to support clinical decisions and pathophysiological rationale. This article describes the problem-solving process used to diagnose and treat a green iguana (Iguana iguana) that presents with ovostasis.
Publication Type
Journal article.

<178>
Accession Number
20083074036
Author
Ricciardi, A.; Kipp, R.
Title
Predicting the number of ecologically harmful exotic species in an aquatic system. (Special Issue: Fifty years of invasion ecology - the legacy of Charles Elton.)
Source
Diversity and Distributions; 2008. 14(2):374-380. many ref.
Publisher
Blackwell Publishing
Location of Publisher
Oxford
Country of Publication
UK
Abstract
Most introduced species apparently have little impact on native biodiversity, but the proliferation of human vectors that transport species worldwide increases the probability of a region being affected by high-impact invaders - i.e. those that cause severe declines in native species populations. Our study determined whether the number of high-impact invaders can be predicted from the total number of invaders in an area, after controlling for species-area effects. These two variables are positively correlated in a set of 16 invaded freshwater and marine systems from around the world. The relationship is a simple linear function; there is no evidence of synergistic or antagonistic effects of invaders across systems. A similar relationship is found for introduced freshwater fishes across 149 regions. In both data sets, high-impact invaders comprise approximately 10% of the total number of invaders. Although the mechanism driving this correlation is likely a sampling effect, it is not simply the proportional sampling of a constant number of repeat-offenders; in most cases, an invader is not reported to have strong impacts on native species in the majority of regions it invades. These findings link vector activity and the negative impacts of introduced species on biodiversity, and thus justify management efforts to reduce invasion rates even where numerous invasions have already occurred.
Publication Type
Journal article.

<179>
Accession Number
20083129310
Author
Greenacre, C.
Title
Special Issue: Diagnostic testing. (Special Issue: Diagnostic testing.)
Source
Journal of Exotic Pet Medicine; 2008. 17(1):1-59.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
This issue contains 6 topics on diagnostic testing of diseases in exotic pets, including rabbits, rodents, pets and monkeys.
Publication Type
Journal issue.

<180>
Accession Number
20083174084
Author
Phillips, B. L.; Chipperfield, J. D.; Kearney, M. R.
Title
The toad ahead: challenges of modelling the range and spread of an invasive species. (Special Issue: Invasion ecology of vertebrates.)
Source
Wildlife Research; 2008. 35(3):222-234.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
An ability to predict the rate at which an organism spreads its range is of growing importance because the process of spread (during invasion by an exotic species) is almost identical to that occurring at the expanding range margins of a native species undergoing range shifts in response to climate change. Thus, the methods used for modelling range spread can also be employed to assess the distributional implications of climate change. Here we review the history of research on the spread of cane toads in Australia and use this case study to broadly examine the benefits and pitfalls of various modelling approaches. We show that the problems of estimating the current range, predicting the future range, and predicting the spread rate are interconnected and inform each other. Generally, we argue that correlative approaches to range-prediction are unsuitable when applied to invasive species and suggest that mechanistic methods are beginning to look promising (despite being more difficult to execute), although robust comparisons of correlative versus mechanistic predictions are lacking. Looking to the future, we argue that mechanistic models of range advance (drawing from both population ecology and environmental variation) are the approaches most likely to yield robust predictions. The complexity of these approaches coupled with the steady rise in computing power means that they have only recently become computationally tractable. Thus, we suggest that the field is only recently in a position to incorporate the complexity necessary to robustly model the rate at which species shift their range.

Publication Type
Journal article.

<181>
Accession Number
20083172863
Author
McNally, J.; Boesen, K.; Boyer, L.
Title
Toxicologic information resources for reptile envenomations. (Special Issue: Toxicology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2008. 11(2):389-401. 13 ref.
Publisher
W.B. Saunders
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
The United States is the largest importer of reptiles in the world, with an estimated 1.5 to 2.0 million households keeping one or more reptiles. Snakes account for about 11% of these imports and it has been estimated that as many as 9% of these reptiles are venomous. Envenomations by nonindigenous venomous species are a rare but often serious medical emergency. Bites may occur during the care and handling of legitimate collections found in universities, zoos, or museums. The other predominant source of exotic envenomation is from amateur collectors participating in importation, propagation, and trade of non-native species. This article provides toxicologic information resources for snake envenomations.
Publication Type
Journal article.

<182>
Accession Number
20083172852
Author
LaBonde, J.
Title
Special Issue: Toxicology. (Special Issue: Toxicology.)
Source
Veterinary Clinics of North America: Exotic Animal Practice; 2008. 11(2):195-421.
Publisher
W.B. Saunders
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
This special issue includes 11 papers covering the toxicology of exotic animals. All the important basics of diagnostic sampling and establishing a minimum database are presented as well as critical care of the toxicology patient. The different exotic animals and their toxicological conditions are discussed. The most common and relevant information related to toxicology for exotic animals are compiled. Articles on toxic exotics and toxicological information resources for reptile envenomations are also included.
Publication Type
Journal issue.

<183>
Accession Number
20073180460
Author
Whittington, R. J.; Chong, R.
Title
Global trade in ornamental fish from an Australian perspective: the case for revised import risk analysis and management strategies.
Source
Preventive Veterinary Medicine; 2007. 81(1/3):92-116. many ref.
Publisher
Elsevier
Location of Publisher
Amsterdam
Country of Publication
Netherlands
Abstract
Over 1 billion ornamental fish comprising more than 4000 freshwater and 1400 marine species are traded internationally each year, with 8-10 million imported into Australia alone. Compared to other commodities, the pathogens and disease translocation risks associated with this pattern of trade have been poorly documented. The aim of this study was to conduct an appraisal of the effectiveness of risk analysis and quarantine controls as they are applied according to the Sanitary and Phytosanitary (SPS) agreement in Australia. Ornamental fish originate from about 100 countries and hazards are mostly unknown; since 2000 there have been 16-fold fewer scientific publications on ornamental fish disease compared to farmed fish disease, and 470 fewer compared to disease in terrestrial species (cattle). The import quarantine policies of a range of countries were reviewed and classified as stringent or non-stringent based on the levels of pre-border and border controls. Australia has a stringent policy which includes pre-border health certification and a mandatory quarantine period at border of 1-3 weeks in registered quarantine premises supervised by government quarantine staff. Despite these measures there have been many disease incursions as well as establishment of significant exotic viral, bacterial, fungal, protozoal and metazoan pathogens from ornamental fish in farmed native Australian fish and free-living introduced species. Recent examples include Megalocytivirus and Aeromonas salmonicida atypical strain. In 2006, there were 22 species of alien ornamental fish with established breeding populations in waterways in Australia and freshwater plants and molluscs have also been introduced, proving a direct transmission pathway for establishment of pathogens in native fish species. Australia's stringent quarantine policies for imported ornamental fish are based on import risk analysis under the SPS agreement but have not provided an acceptable level of protection (ALOP) consistent with government objectives to prevent introduction of pests and diseases, promote development of future aquaculture industries or maintain biodiversity. It is concluded that the risk analysis process described by the Office International des Epizooties under the SPS agreement cannot be used in a meaningful way for current patterns of ornamental fish trade. Transboundary disease incursions will continue and exotic pathogens will become established in new regions as a result of the ornamental fish trade, and this will be an international phenomenon. Ornamental fish represent a special case in live animal trade where OIE guidelines for risk analysis need to be revised. Alternatively, for countries such as Australia with implied very high ALOP, the number of species traded and the number of sources permitted need to be dramatically reduced to facilitate hazard identification, risk assessment and import quarantine controls.
Publication Type
Journal article.

<184>
Accession Number
20073187277

Author
Baumgartner, T.
Title
Pentoxifylline. (Special issue: Opthalmology.)
Source
Journal of Exotic Pet Medicine; 2007. 16(2):118-121. 36 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
This article discusses the pharmacokinetics and pharmacodynamics of pentoxifylline. Several studies on the use of pentoxifylline in man, livestock, companion animals and poultry are reviewed. The side effects of this drug are also presented. Pentoxifylline appears to have great promise in the treatment of many disease states, including dermatologic disease, ischaemia and reperfusion injury, late-term radiation injury and endotoxic shock. However, controlled clinical trials in exotic species still need to be performed to document this.
Publication Type
Journal article.

<185>
Accession Number
20073187270
Author
Storey, E.
Title
Special issue: Opthalmology. (Special issue: Opthalmology.)
Source
Journal of Exotic Pet Medicine; 2007. 16(2):130 pp.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
This issue is comprised of 8 articles on eye diseases in exotic pets and their treatment. The following topics are covered: standard enucleation techniques for small pet exotic species; new approach to an intraocular prosthesis; anatomy and physiology of the avian eye; release of visually impaired raptors; and ophthalmic problems unique to fish and investigative techniques required to correct and prevent debilitating ophthalmic conditions.
Publication Type
Journal issue.

<186>
Accession Number
20073172022
Author
Pascual, M. A.; Cussac, V.; Dyer, B.; Soto, D.; Vigliano, P.; Ortubay, S.; Macchi, P.
Title

Freshwater fishes of Patagonia in the 21st Century after a hundred years of human settlement, species introductions, and environmental change. (Special issue: Freshwater fishes of South America: their biodiversity, fisheries, and habitat.)
Source
Aquatic Ecosystem Health & Management; 2007. 10(2):212-227. many ref.
Publisher
Taylor & Francis
Location of Publisher
Philadelphia
Country of Publication
USA
Abstract
We review the status of the freshwater fish fauna of Patagonia, an assemblage with 26 native species, comprising fishes of Gondwanan origin, marine dispersants, and oceanic elements of local origin. Several processes, old and new, have shaped the landscape of Patagonia and its fauna: a Gondwanan heritage, the Andes uplifting, Pleistocene ice, volcanic activity, introduction of exotic fishes, mostly Salmonids, and climate change. While there is a significant tradition of taxonomic work on native fish species, research on life history, trophic relationships, and community structure has started to emerge only in the last 15 years. Most studies were conducted in oligotrophic lakes of the Andes; while fauna of streams remains poorly observed. While documentation of impacts by salmonids is scarce, there is some compelling evidence indicating that freshwater communities have been significantly shaped by exotic fish. Impacts by exotic species appear to be dependent on temperature on the east side of the Andes, and land use and watershed perturbation on the west side. In general, freshwater habitat conditions and how they affect fishes are poorly studied. In lakes, habitat complexity and its specialized use by native fishes may have ameliorated the impact by introduced salmonids. Although impacts on rivers abound, led by dam construction, the relationship between stream habitat integrity and native species health is still poorly understood. The future of freshwater resources will largely depend on how able we are to inform managers, the general public and colleagues about their value and the costs of not taking action. But current research capacity is insufficient to deal with most demands because of limitations in people, resources and baseline information. To support our claims, we need to promote regional assessments of freshwater resources and of major threats to their integrity, the building blocks of a regional agenda for their sustainable use.
Publication Type
Journal article.

<187>
Accession Number
20063221312
Author
Capello, V.
Title
The dental suite: equipment needed for handling small exotic mammals. (Special Issue: Equipment.)
Source
Journal of Exotic Pet Medicine; 2006. 15(2):106-115. 10 ref.
Publisher
Elsevier
Location of Publisher
New York
Country of Publication
USA
Abstract
Dentistry is a very important branch of medicine and surgery for exotic pet mammals. Because of their anatomical and physiological differences, many health problems in pet rabbits and herbivorous rodent species are primarily or secondarily related to dental diseases, making this discipline even more important for this group of mammals. Special equipment and other materials are available for diagnosis and treatment of dental diseases in these species. Among them, the most important are mouth gags, cheek dilators, specially designed luxators and extraction forceps and straight hand pieces for high-speed dental units for

cutting and polishing. The small exotic mammal dental suite should also include radiographic and endoscopic equipment.
Publication Type
Journal article.

<188>
Accession Number
20053091743
Author
Schoemaker, N. J.; Zandvliet, M. M. J. M.
Title
Electrocardiograms in selected species. (Special issue: cardiology)
Source
Seminars in Avian and Exotic Pet Medicine; 2005. 14(1):26-33. 6 ref.
Publisher
Elsevier Inc
Location of Publisher
Orlando
Country of Publication
USA
Abstract
This article describes the procedures involved in electrocardiogram (ECG) recordings in exotic pets, including small mammals (ferrets, guineapigs and rabbits), birds (parrots and pigeons), reptiles (iguanas, snakes and turtles) and amphibians (toads).
Publication Type
Journal article.

<189>
Accession Number
20053124307
Author
Zymantiene, J.; Mikniene, Z.; Cernauskas, A.; Samulyte, E.
Title
An influence of environment and nutrition on the morphological and biochemical parameters of blood in the organism of budgerigars. [Lithuanian]
Source
Veterinarija ir Zootechnika; 2005. (30):40-43. 11 ref.
Publisher
Lietuvos Veterinarijos Akademija
Location of Publisher
Kaunas
Country of Publication
Lithuania
Abstract
Exotic avians kept as pets in Lithuania are increasing. When the budgerigars are kept in captivity and in the cages, their housing and nutrition must be comparable to the conditions in the wild. The wild budgerigars diet consisted of >30 different plants. The lifespan of birds kept as pet is 3-5 or 7 years, while it is 15-20 years in the wild. Lifespan of birds depended on the quality of feed and ingredients in the diet. Veterinarians often treat budgerigars for digestive tract diseases, bone fractures, ectoparasites, hypertrophy and deformation of cere, metabolic diseases, deficiency diseases and infectious diseases. Now, there are various kinds of diet for budgerigars in Lithuania and other foreign countries, and most of these diets are composed of natural products. The aim of our study was to establish a clinical condition and environment of keeping, and

determine the morphological and biochemical blood changes of budgerigars under the SL and NL feeding technologies. The experiment was carried out at the Laboratory of Poultry section of Lithuanian Zoo between May and June 2003. Adult budgerigars were divided in two analogical groups (n=10). Sex identification was determined by looking at the colour of its cere. The budgerigars of the first group was fed with natural product (NL) diet, while the second group, after an intermediate period, was fed with special commercial (SL) diet. Blood was taken from the wing vein before the experiment and 14 days after using the 2 different diets. Different types of leukocytes were obtained using a formula in leukocytes determination. The blood swabs were stunned and imbrued in Pappenheim. For the concentration of glucose (GL), triglycerides (TG) and cholesterol (CH) in the blood, a reflex photometer Accutrend GCT (2001) was used. Oxygen volume of the blood was estimated using the Hufner method. The quantity of haemoglobin was determined by the colorimetric method. The quantity of erythrocytes was observed under a haemocytometer. The mean corpuscular haemoglobin was determined according to the Matuzevicene and Jurgutis method. The budgerigars used in all groups were healthy. The application of different NL and SL feeding technologies influenced the changes in the biochemical and morphological blood parameters. No differences were observed between the first and the second leucograms. Only insignificant morphological differences of leukocytes were noticed in male and female blood of the groups. The number of lymphocytes, eosinophils and monocytes in female blood were 4.0, 3.0 and 8.0% higher when compared with the male blood in both groups, respectively. The number of basophils and heterophils were 2.0 and 16.0% higher in male blood when compared with the female blood indicators, respectively. When birds were given with different feeds supplemented with sunflower and pumpkin seeds, the number of erythrocytes, haemoglobin, average haemoglobin concentration per erythrocyte and oxygen volume of the blood were 1.54, 6.25, 7.01 and 6.46% higher when compared with the control, respectively. The concentration of blood cholesterol, glucose and triglycerides were 2.28, 13.16 and 1.48% higher when compared with the control group, respectively.
Publication Type
Journal article.

<190>
Accession Number
20053186017
Author
Mitchell, M. A.
Title
Azithromycin. (Special issue: Oncology)
Source
Seminars in Avian and Exotic Pet Medicine; 2005. 14(3):212-214. 18 ref.
Publisher
Elsevier Inc
Location of Publisher
Orlando
Country of Publication
USA
Abstract
Azithromycin represents an important antibiotic from a new subclass of macrolides. The large spectrum of activity against not only Gram-positive and Gram-negative bacterial pathogens, but protozoa, rickettsia, and spirochetes, suggests that this antibiotic can play an important role in the veterinarian's pharmacologic arsenal. In addition to its wide coverage, this antibiotic can achieve exceptionally high concentrations in tissues, which may lend it to treating infectious diseases that would otherwise evade antibiotics. However, to know the true value of this antibiotic, additional research is needed to elaborate on its usefulness across species. Veterinarians considering the use of this antibiotic should base their decision on sound diagnostic testing, including culture and antimicrobial sensitivity.
Publication Type
Journal article.

<191>
Accession Number
20053186016
Author
Lucroy, M. D.
Title
Photodynamic therapy: potential applications for exotic animal oncology. (Special issue: Oncology)
Source
Seminars in Avian and Exotic Pet Medicine; 2005. 14(3):205-211. 52 ref.
Publisher
Elsevier Inc
Location of Publisher
Orlando
Country of Publication
USA
Abstract
Photodynamic therapy (PDT) is a novel form of treatment for solid cancers. It relies on the systemic administration of a light-reactive drug (photosensitizer) to the patient. Through various mechanisms, the photosensitizer localizes to the malignant tissue. The photosensitizer is then activated by visible red light, often provided by a laser. The drug and light alone do not cause tissue damage; when the photosensitizer, light, and molecular oxygen are present together, the reactive oxygen species generated locally lead to apoptosis, vascular stasis, and subsequent ischemic necrosis, and inflammation. PDT is potentially useful for the treatment of exotic animals, because it has fewer adverse effects than radiation therapy or chemotherapy. Because PDT is typically a single session, there are fewer issues with repeated general anesthesia and vascular access. To date, experiences with PDT in exotic animals are limited, but preliminary reports suggest it will become a useful treatment in these species. Further knowledge of photosensitizer pharmacokinetics and tumor biology in exotic animals will be necessary to develop PDT into a useful cancer treatment modality.
Publication Type
Journal article.

<192>
Accession Number
20053186013
Author
Heatley, J. J.; Mauldin, G. E.; Cho, D. Y.
Title
A review of neoplasia in the captive African hedgehog (Atelerix albiventris). (Special issue: Oncology)
Source
Seminars in Avian and Exotic Pet Medicine; 2005. 14(3):182-192. 18 ref.
Publisher
Elsevier Inc
Location of Publisher
Orlando
Country of Publication
USA
Abstract
African hedgehogs are increasingly popular pets: they are easy to care for, interesting, and interactive. Although their expected lifespan is only 1 to 4 years in the wild, sound nutritional advice and high-quality veterinary care have lengthened the captive lifespan of these animals. Unfortunately, multiple reviews document that the geriatric hedgehog, although only 3 to 5 years old, is predisposed to neoplastic disease. This article reviews previously reported neoplasms of the hedgehog by system; 24 additional cases are also described. Typical signalment, clinical signs, and tumor behavior are outlined, and appropriate diagnostics and treatment options are discussed where possible. The intent of this review is to provide the practitioner with a relevant and practical guide to the management of neoplasia in the African hedgehog.

Publication Type
Journal article.

<193>
Accession Number
20033209185
Author
Cambray, J. A.
Title
Impact on indigenous species biodiversity caused by the globalisation of alien recreational freshwater fisheries. (Special issue: Aquatic biodiversity. A celebratory volume in honour of Henri J. Dumont)
Source
Hydrobiologia; 2003. 500217-230. many ref.
Publisher
Kluwer Academic Publishers
Location of Publisher
Dordrecht
Country of Publication
Netherlands
Abstract
One of the most insidious threats to fish conservation around the world is deliberate or accidental introduction of fish species. The impact of alien invasive sport fish is for the most part unpredictable in time and space, with the introduction of relatively few species having resulted in many extirpations of indigenous fish species worldwide. More nations need to quantify biodiversity loss caused by alien sport fishes. The spread of alien invasive fishes does not respect political boundaries. Therefore total global costs to aquatic biodiversity and ecosystem functioning resulting from these introductions need to be assessed. The global invasive species database of the Global Invasive Species Programme, highlights eight fish species among the one hundred 'World's Worst Invasive Alien Species'. Three of these fish species (two trout and one bass species) were introduced solely for sport. Historically the social value of recreational fishing was usually more important than conserving biodiversity. Globalization of alien fish species for sport is best illustrated by rainbow trout - now in 82 countries, and still spreading, along with the associated expensive angling gear, magazines and accommodation infrastructure. Such sport species have become part of the global consumer society. The nature and extent of the globalization phenomenon is addressed with regard to how introduction of alien fish for recreational angling has impacted on biodiversity; trophic cascades at a local level and the unassessed total cumulative global trophic cascades; and some of the motives that underlie promotion of this sport within the complexity of globalization as we know it today. Alien invasive recreational fish species are now recognised as a global environmental degradation problem resulting in loss of biodiversity and therefore require a global solution. Parallel trends such as globalization of environmental education and the internet must be encouraged to counteract the damage caused and reverse the trend. This globally concerted campaign requires utilizing environmental education forums aimed at the angling community, general public and policy makers; networking with existing alien invasive groups; legislation; better understanding of processes; development of environmental economic evaluation tools; international bio-invasion control; wider use of the precautionary approach and utilization of the present globalization of ecological thought.
Publication Type
Journal article.

<194>
Accession Number
20033016006
Author
Zheng Tao; Napier, A. M.; Parkes, J. P.; O'Keefe, J. S.; Atkinson, P. H.
Title

Detection of RNA of rabbit haemorrhagic disease virus from New Zealand wild rabbits. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):683-688. 17 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
Rabbit numbers have returned to high levels in some areas of New Zealand following the initial spread of rabbit haemorrhagic disease virus (RHDV). We undertook to determine whether possible infection with an RHDV-related virus was interfering with the initiation of new outbreaks of rabbit haemorrhagic disease (RHD). RHDV RNA was detected by polymerase chain reaction with reverse transcription (RT-PCR) using RHDV-specific primers from tissue samples of wild rabbits that had been shot in the field. RHDV RNA was detected in 11 of 19 rabbits from an area of Otago where the rabbit population had greatly expanded and in 2 of 8 rabbits from the West Coast where outbreaks of RHD had not been previously reported. Among the 13 rabbits positive for RHDV RNA, 10 had detectable antibodies against RHDV. The nucleotide sequences of the isolates - a segment of the RHDV capsid gene - shared about 99% identity with that of the Czech strain V351 and that of a 1997 New Zealand wild isolate, but shared only about 84% identity with that of a European benign rabbit calicivirus. These results provide evidence for persistent infection of RHDV in rabbits.
Publication Type
Journal article.

<195>
Accession Number
20033016005
Author
Cooke, B. D.; McPhee, S.; Robinson, A. J.; Capucci, L.
Title
Rabbit haemorrhagic disease: does a pre-existing RHDV-like virus reduce the effectiveness of RHD as a biological control in Australia? (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):673-682. 27 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
Serological data from wild rabbits support the hypothesis that a second RHDV-like virus was already present in Australia before rabbit haemorrhagic disease virus (RHDV) was introduced as a biological control agent. This putative virus apparently persists in most wild rabbit populations in the presence of RHDV, and antibodies raised against it appear to protect some rabbits from fatal rabbit haemorrhagic disease (RHD). High titres of these antibodies are most commonly found in rabbits from high rainfall areas; this may explain why the initial mortality from RHD declined as the disease spread from dry areas into wetter regions and why it remains less effective as a biological control in wetter regions today. The implications for further advances in rabbit control are discussed, including the need to isolate this putative RHDV-like virus and develop specific ELISA tests to facilitate its detection in the field.
Publication Type
Journal article.

<196>
Accession Number
20033016002
Author
Barlow, N. D.; Barron, M. C.; Parkes, J.
Title
Rabbit haemorrhagic disease in New Zealand: field test of a disease-host model. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):649-653. 9 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
An earlier published model, parameterized from qualitative data from Europe and detailed observations of the first simple epidemic in Australia, gave a good fit to longer-term (3 year) data from New Zealand, without any re-tuning of parameters. Changing some of the unknown disease parameters further improved the model's fit, but two problems remained. Firstly, predicted proportions seropositive are too high if rabbit densities are as low as observed, and if the proportions seropositive are correct then the predicted densities are too high. Secondly, observed rabbit densities do not show obvious peaks of recruitment, as predicted by the model with and without RHD. Possible reasons for these discrepancies are suggested, and initial trials with the model suggested that a novel transmission mechanism involving both direct (rabbit to rabbit) and indirect (via free-living virus) transmission may help explain both high suppression and low antibody levels. The main conclusions from the original model remain unaffected by its testing against new data, namely: rabbit populations are likely to be suppressed in the long term by about 75%; the pattern of epidemics is determined largely by intrinsic disease behaviour rather than seasonality, though the latter may tune this to some extent; there tend to be yearly epidemics; percentages of rabbits infected at any one time are low (around 5%) but this does not imply low impact; maternal antibodies have little effect on RHD dynamics; RHD may persist in low-density as well as high-density populations but give less suppression; and additional control may eradicate disease, at least temporarily.
Publication Type
Journal article.

<197>
Accession Number
20033016001
Author
McPhee, S. R.; Berman, D.; Gonzales, A.; Butler, K. L.; Humphrey, J.; Muller, J.; Waddington, J. N.; Daniels, P.; Koch, S.; Marks, C. A.
Title
Efficacy of a competitive enzyme-linked immunosorbent assay (cELISA) for estimating prevalence of immunity to rabbit haemorrhagic disease virus (RHDV) in populations of Australian wild rabbits (Oryctolagus cuniculus). (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):635-647. 20 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication

Australia
Abstract
This study examines the efficacy of a cELISA in estimating the prevalence of immunity to rabbit haemorrhagic disease virus (RHDV) in wild rabbits in Australia. Rabbits (n=343) captured from six locations in Victoria and Queensland were experimentally challenged with a lethal oral dose (1500 50%-lethal doses, LD50) of RHDV. Death or survival to challenge was used to determine the performance characteristics of the test. The diagnostic specificity, sensitivity and accuracy were highly variable between sites, making it difficult to select a representative cut-off value for all sites that achieved a reasonable level of accuracy for the prediction of surviving and non-surviving rabbits. Estimates of prevalence of immunity were biased owing to effects of site of capture (time of capture) and age structure of the population. Using predictive equations, the best estimates of survival were +or-10% but these results came from a limited range of sites, all of which had survival in the range 49-70%. The cELISA will determine whether the RHDV is present in rabbit populations but it should be used with caution when estimating the prevalence of immunity to RHDV. The cELISA may thus be limited in its application for examining the epidemiology of RHDV in Australian rabbit populations.
Publication Type
Journal article.

<198>
Accession Number
20033016000
Author
Reddiex, B.; Hickling, G. J.; Norbury, G. L.; Frampton, C. M.
Title
Effects of predation and rabbit haemorrhagic disease on population dynamics of rabbits (Oryctolagus cuniculus) in North Canterbury, New Zealand. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):627-633. 44 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
The impact of predation and rabbit haemorrhagic disease (RHD) on population dynamics of rabbits, and the survival of juvenile rabbits, was investigated between July 1999 and March 2000 in North Canterbury, New Zealand. Rabbit abundance and pre- and post-emergent rabbit mortality were monitored on four sites, two of which were subject to predator control. RHD spread naturally through all sites from late November to early December. Rabbit densities declined on all sites, but after the RHD epidemic, declines were significantly greater where populations of predators had not been controlled. Survival of rabbit nestlings was lower where predators were not controlled. All post-emergent radio-collared rabbits died at sites where predators were not controlled, whereas 18% of those collared at sites where predators were controlled survived to maturity. In contrast to the results from previous studies, rabbits born at the start of the breeding season had very high rates of post-emergent mortality, as they appeared to be susceptible to the RHD virus later in the breeding season. The age at which juvenile rabbits become susceptible to RHD, the timing of RHD epidemics, and the abundance of predators are likely to be important in determining survival of juvenile rabbits. This study demonstrates that predation can reduce rabbit populations to low levels, but only in combination with other factors, in this case RHD.
Publication Type
Journal article.

<199>

Accession Number
20033015999
Author
Holden, C.; Mutze, G.
Title
Impact of rabbit haemorrhagic disease on introduced predators in the Flinders Ranges, South Australia. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):615-626. 43 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
The impact of rabbit haemorrhagic disease (RHD) on the population dynamics and diet of foxes and feral cats was studied in the Flinders Ranges, South Australia. Populations of both foxes and cats decreased substantially some 6-10 months after the advent of RHD, when rabbit numbers were reduced by 85%. The diet of foxes changed as a result of reduced rabbit numbers, with much less rabbit and more invertebrates and carrion being eaten. The physical condition of foxes showed little change after RHD. The diet of cats did not change markedly, but their physical condition was substantially poorer than before RHD. Total predation on native fauna is considered to have decreased after RHD.
Publication Type
Journal article.

<200>
Accession Number
20033015998
Author
Saunders, G.; Kay, B.; Mutze, G.; Choquenot, D.
Title
Observations on the impacts of rabbit haemorrhagic disease on agricultural production values in Australia. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):605-613. 25 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
Rabbit haemorrhagic disease (RHD) may be the most important rabbit control agent to be made available to graziers in Australia since the advent of myxomatosis. Documenting the benefits of RHD to agricultural production values is an important process in determining best-practice strategies for the use of the disease in controlling rabbit populations. In this paper, we review previous studies on the impact of rabbits and present recent Australian (New South Wales and South Australia) case studies that tracked the effects of RHD on agricultural production as the disease first spread across the continent. Indirect consequences of RHD, such as changes in costs of rabbit control as monitored through the use of 1080 (sodium monofluoroacetate), are reported. Potential negative impacts such as adverse effects on the wild rabbit fur and meat trade and in the spread of woody weeds are also discussed.
Publication Type
Journal article.

<201>
Accession Number
20033015997
Author
Norbury, G.; Heyward, R.; Parkes, J.
Title
Short-term ecological effects of rabbit haemorrhagic disease in the short-tussock grasslands of the South Island, New Zealand. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):599-604. 17 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
Rabbit haemorrhagic disease (RHD) has reduced populations of rabbits (Oryctolagus cuniculus) across most rabbit-prone short-tussock grasslands (comprised of Festuca novae-zelandiae, Poa colensoi interspersed with exotic grasses and herbs) of New Zealand, at scales rarely seen there before. Flow-on effects to other parts of these ecosystems will be inevitable. We report evidence for increases in pasture biomass, increases in abundance of other exotic herbivores, declines in abundance of rabbit-specialist predators, and short-term increases in predation rates of some native birds by these predators. At one site in Central Otago, RHD reduced an index of rabbit abundance by 88%, and an index of their grazing impacts by 77%. Recovered biomass consisted mostly of fast-growing exotic pasture species of moderate palatability to livestock. Spotlight counts and hunters' returns suggest increases in possum (Trichosurus vulpecula) and hare (Lepus europeaus) abundance, but their grazing pressure is unlikely to replace that originally imposed by rabbits. The apparent increase in possum numbers poses an increased risk from the spread and maintenance of bovine tuberculosis (Tb), although this risk may be offset by declines in the counts of ferrets (Mustela furo), which also carry Tb. Declines in predator numbers (including feral cats, Felis catus) may also, in the longer term, benefit some native fauna that are secondary prey of these predators. There is evidence for increased predation of some native birds' eggs since RHD arrived. It is not possible at this stage to generalize the effects of RHD-induced declines in rabbit abundance on New Zealand ecosystems. Effects are highly variable, and their implications for pastoral production, management of bovine Tb, and conservation of native species are likely to vary locally according to the suite of plant and animal species originally present.
Publication Type
Journal article.

<202>
Accession Number
20033015995
Author
Mutze, G.; Bird, P.; Kovaliski, J.; Peacock, D.; Jennings, S.; Cooke, B.
Title
Emerging epidemiological patterns in rabbit haemorrhagic disease, its interaction with myxomatosis, and their effects on rabbit populations in South Australia. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):577-590. 37 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood

Country of Publication
Australia
Abstract
The impact of rabbit haemorrhagic disease (RHD) on wild rabbit populations was assessed by comparing population parameters measured before the introduction of RHD into Australia in 1995 with population parameters after RHD. We used data from an arid inland area and a moist coastal area in South Australia to examine the timing and extent of RHD outbreaks, their interaction with myxomatosis and their effect on breeding, recruitment and seasonal abundance of rabbits. From this we propose a generalized conceptual model of how RHD affects rabbit populations in southern Australia. RHD decreased long-term average numbers of rabbits by 85% in the arid area. In the coastal area, RHD decreased numbers of rabbits by 73% in the first year but numbers gradually recovered and were only 12% below pre-RHD numbers in the third year. Disease activity generally begins a month or two after the commencement of breeding in autumn or winter, peaks in early spring and ceases to be apparent in summer. Where the disease is most active, the pattern of population change is almost the inverse of the former pattern. During the breeding season, RHD severely suppresses rabbit numbers. Compensatory recruitment of late-born young, protected by maternal antibodies until the disease becomes inactive at the end of spring (also the end of breeding), allows the observed rabbit abundance to increase during summer, albeit to lower levels than before RHD. Maternal antibodies are lost during summer and the population becomes susceptible to RHD. The seasonal peak in myxomatosis activity is pushed back from late spring to early summer or autumn. Survivors of myxomatosis breed after opening rains in autumn but many succumb to RHD before raising their litters. The reduced abundance of rabbits and changed pattern of seasonal abundance have potential consequences for vegetation recovery.
Publication Type
Journal article.

<203>
Accession Number
20033015994
Author
Edwards, G. P.; Dobbie, W.; Berman, D. M.
Title
Warren ripping: its impacts on European rabbits and other wildlife of central Australia amid the establishment of rabbit haemorrhagic disease. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):567-575. many ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
The impacts of warren ripping on European rabbits and other wildlife were studied at four sites in central Australia over a 2.5-year period. At each site, treated (ripped) and untreated plots were established. On the treated plots, warrens were ripped over an area of 20-140 km2. Rabbit haemorrhagic disease (RHD) became established in central Australia during the study. There were fewer rabbits on ripped plots compared with untreated plots both before and after the establishment of RHD. There was also less sign of exotic predators (red foxes and feral cats) on ripped plots. The amount of dingo sign observed and the number of peregrine falcons, brown falcons, kites and goshawks combined and kestrels and hobby falcons combined changed with time but no treatment effect was detected. No consistent treatment effect was detected for red kangaroos, varanid lizards, small mammals or other raptor species.
Publication Type
Journal article.

<204>
Accession Number
20033015993
Author
Edwards, G. P.; Dobbie, W.; Berman, D. M.
Title
Population trends in European rabbits and other wildlife of central Australia in the wake of rabbit haemorrhagic disease. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):557-565. 46 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
Before the establishment of rabbit haemorrhagic disease (RHD) in central Australia in May 1996, a program was instituted to monitor its impacts at six localities broadly distributed across the region. At these sites, population trends in rabbits and other wildlife were studied over a 2.5-year period. Rabbit populations declined by approximately 85% following establishment of RHD at the sites, and had not recovered 22 months later. More varanid lizards were detected on our survey plots 12-22 months after RHD than during the preceding period. Although numbers of dingoes and wedge-tailed eagles varied during the study, significant population reductions were not detected in either species in the wake of RHD. Significant population changes were not detected in red foxes, feral cats, red kangaroos, small mammals, or other raptor species.
Publication Type
Journal article.

<205>
Accession Number
20033015991
Author
Henzell, R. P.; Cunningham, R. B.; Neave, H. M.
Title
Factors affecting the survival of Australian wild rabbits exposed to rabbit haemorrhagic disease. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):523-542. 46 ref.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
Rabbit haemorrhagic disease virus (RHDV) is foreign to Australia, and first entered populations of Australian wild rabbits (Oryctolagus cuniculus L.) in Australia in late 1995. Rabbits are serious environmental and agricultural pests in Australia, and RHDV, a major new pathogen, was introduced as a biological control agent to reduce their numbers. Our study evaluated some of the factors affecting survival of wild rabbits exposed to rabbit haemorrhagic disease (RHD) at 78 sites across Australia. Our data on rabbit numbers consist of the number of rabbits per spotlight kilometre present shortly before and shortly after an RHD outbreak at each site. They are a direct measure of survival rather than mortality. By reducing the interval between the pre- and post-RHD counts to the minimum possible, we sought to minimize the influence on the

analysis of other causes of change in rabbit numbers. We calculated proportional survival as the ratio (number of rabbits present after RHD)/(number present before RHD), and used regression analysis to relate it to environmental and other variables. Proportional survival was lower at higher densities of rabbits; was lower if RHDV arrived naturally at the site rather than if it was deliberately released; was lower in areas with hot, dry climates than in areas with cold, wet climates; was lower in southern, inland areas than in warm, coastal areas; and, if the outbreak occurred during summer, was lower in areas of winter rainfall than in areas of summer rainfall. Rainfall seasonality was not correlated with survival at other times of the year. Only in the last effect was there a significant interaction with the time of the year that the outbreak occurred. Our statistical model describes correlations among the data, but does not in itself establish cause and effect. We interpret the properties of our statistical model to draw the following conclusions. First, the effectiveness of RHD is reduced in cold, wet areas and warm, coastal areas, because of the prevalence in these areas of one or more pre-existing caliciviruses in rabbits that impart year-round resistance to RHD. Second, we conclude that the poor summertime performance of RHD in areas that are wet in summer could result from poor survival of RHDV exposed to the combination of high temperature and high relative humidity, although it is also possible that during summer the effectiveness of vectors declines.
Publication Type
Journal article.

<206>
Accession Number
20033015990
Author
Cooke, B.; Saunders, G.
Title
Rabbit haemorrhagic disease in Australia and New Zealand. (Special issue: Rabbit haemorrhagic disease)
Source
Wildlife Research; 2002. 29(6):521-711.
Publisher
CSIRO Publishing
Location of Publisher
Collingwood
Country of Publication
Australia
Abstract
The seventeen papers in this special issue of the Wildlife Research discuss rabbit haemorrhagic disease (RHD) and its epidemiology and ecological impact in wild and domestic rabbits in Australia and New Zealand; immunodiagnosis and immunological techniques; the interaction of RHD virus with myxoma virus, calicivirus and putative RHDV-like viruses; and the significance of RHDV as a biological control agent for wild rabbits.
Publication Type
Journal issue.

<207>
Accession Number
20023139722
Author
Wappler, O.; Allgoewer, I.; Schaeffer, E. H.
Title
Conjunctival dermoid in two guinea pigs: a case report. (Exotic and Laboratory Animal Special Issue)
Source
Veterinary Ophthalmology; 2002. 5(3):245-248. 23 ref.
Publisher

Blackwell Science
Location of Publisher
Oxford
Country of Publication
UK
Publication Type
Journal article.

<208>
Accession Number
20023139719
Author
Allgoewer, I.; Gobel, T.; Stockhaus, C.; Schaeffer, E. H.
Title
Dacryops in a red-eared slider (Chrysemys scripta elegans): case report. (Exotic and Laboratory Animal Special Issue)
Source
Veterinary Ophthalmology; 2002. 5(3):231-234. 23 ref.
Publisher
Blackwell Science
Location of Publisher
Oxford
Country of Publication
UK
Publication Type
Journal article.

<209>
Accession Number
20023139718
Author
O'Reilly, A.; McCowan, C.; Hardman, C.; Stanley, R.
Title
Taenia serialis causing exophthalmos in a pet rabbit. (Exotic and Laboratory Animal Special Issue)
Source
Veterinary Ophthalmology; 2002. 5(3):227-230. 26 ref.
Publisher
Blackwell Science
Location of Publisher
Oxford
Country of Publication
UK
Publication Type
Journal article.

<210>
Accession Number
20023139716

Author
Abou-Madi, N.; Kern, T. J.
Title
Squamous cell carcinoma associated with a periorbital mass in a veiled chameleon (Chamaeleo calyptratus). (Exotic and Laboratory Animal Special Issue)
Source
Veterinary Ophthalmology; 2002. 5(3):217-220. 16 ref.
Publisher
Blackwell Science
Location of Publisher
Oxford
Country of Publication
UK
Publication Type
Journal article.

<211>
Accession Number
20023139715
Author
Felchle, L. M.; Sigler, R. L.
Title
Phacoemulsification for the management of Encephalitozoon cuniculi-induced phacoclastic uveitis in a rabbit. (Exotic and Laboratory Animal Special Issue)
Source
Veterinary Ophthalmology; 2002. 5(3):211-215. 47 ref.
Publisher
Blackwell Science
Location of Publisher
Oxford
Country of Publication
UK
Publication Type
Journal article.

<212>
Accession Number
20023139714
Author
Colitz, C. M. H.; Lewbart, G.; Davidson, M. G.
Title
Phacoemulsification in an adult Savannah monitor lizard. (Exotic and Laboratory Animal Special Issue)
Source
Veterinary Ophthalmology; 2002. 5(3):207-209. 21 ref.
Publisher
Blackwell Science
Location of Publisher
Oxford
Country of Publication
UK
Publication Type
Journal article.

<213>
Accession Number
20023139713
Author
Andrew, S. E.; Clippinger, T. L.; Brooks, D. E.; Helmick, K. E.
Title
Penetrating keratoplasty for treatment of corneal protrusion in a great horned owl (Bubo virginianus). (Exotic and Laboratory Animal Special Issue)
Source
Veterinary Ophthalmology; 2002. 5(3):201-205. 24 ref.
Publisher
Blackwell Science
Location of Publisher
Oxford
Country of Publication
UK
Publication Type
Journal article.

<214>
Accession Number
20023139707
Author
Kuonen, V. J.; Wilkie, D. A.; Morreale, R. J.; Oglesbee, B.; Barrett-Rephun, K.
Title
Unilateral exophthalmia in a European hedgehog (Erinaceus europaeus) caused by a lacrimal ductal carcinoma. (Exotic and Laboratory Animal Special Issue)
Source
Veterinary Ophthalmology; 2002. 5(3):161-165. 24 ref.
Publisher
Blackwell Science
Location of Publisher
Oxford
Country of Publication
UK
Publication Type
Journal article.