GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Mustela erminea***

Mustela erminea 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Carnivora	Mustelidae

Common name Hermelin (German), short-tailed weasel (English, USA), Grosswiesel (German), stoat (English), ermine (English), hermine (French), short-tailed weasel (English), ermine (English, Canada, Eurasia)

Synonym

Similar species *Mustela nivalis*

Summary Mustela erminea (the stoat) is an intelligent, versatile predator specialising in small mammals and birds. It is fearless in attacking animals larger than itself and adapted to surviving periodic shortages by storage of surplus kills. In New Zealand it is responsible for a significant amount of damage to populations of native species.

view this species on IUCN Red List

Species Description
The stoat (*Mustela erminea*) has the typical mustelid shape: a long thin body, a smooth, pointed head, short legs, and five toes on each foot, furred between the pads. The claws are sharp and non-retractile. The ears are short, rounded, and set almost flat into the fur. The eyes are round, black and slightly protruding; the whiskers are very long, and the muzzle is black and dog-like. The body fur is short, normally chestnut brown on the head and back, and white or cream (sometimes shading to yellow or even to apricot) on the underside. The tail is much longer than the extended hind legs, and always tipped with a conspicuous tuft of long black hair, which may be bristled out into a 'bottlebrush' at moments of great excitement (taken from King and Murphy, 2005).

Lifecycle Stages
Female stoats (*Mustela erminea*) have extreme juvenile precocity, mated as nestlings but do not produce the young until following season. Males mature at 10-11 months. Limited to a single litter a year, but in optimal conditions it can be large (10-13 young born). Average life span < 12 months in both sexes, because juvenile mortality can be very high, but those that survive their first year survival have a good chance of living 2-3 years.

Uses
Stoats (*Mustela erminea*) have been used to exterminate pest rodents and rabbits on small islands with few alternative prey (King 1989), but only in certain conditions which are hard to meet. Belief that they could control rabbits was the reason for bringing them to New Zealand, but the islands were too large and alternative prey too abundant (King, 2005).
Stoats were formerly an important source of white fur (ermine) harvested by trappers in Russia and Canada.

Habitat Description
Stoats (*Mustela erminea*) are found anywhere they can find prey from beaches to above the treeline. They are found in all types of forest, grassland, agricultural land, dunes, scrubland and tundra. They are vulnerable to predation from other mammals and raptors so they tend to stick to cover in open country. In alpine areas stoats may spend most of their time in runs and burrows below the snow, this helps provide insulation against extremes in air temperature. Stoats do not avoid human settlemernts and can occasionally be seen in villages and suburban gardens (King, 1983; King and Murphy, 2005).

Reproduction
Placental, with 9-10 month compulsory delay in implantation which divides gestation into two, 2-week periods in different calendar years. Ovulation induced by coitus; ovulation rate averages 8-10 every year, range 1-18, but litter size cut down by progressive intra-uterine mortality when food scarce, to zero in extreme conditions (King *et al*. 2003). Stoats of both sexes must survive to about 14 months old to leave surviving offspring.

Nutrition
Stoats (*Mustela erminea*) are specialist predators of small, warm-blooded vertebrates, preferably mammals of the size of rabbits or water voles and smaller. In the native range different rodents are taken at different times of the year (King, 1983). The most frequently eaten prey of stoats in New Zealand are birds, feral house mice, lagomorphs (rabbits and hares, not distinguishable from small remains), rats, possums, and insects (mostly weta of the genera *Hemideina*, *Hemiandrus* and *Gymnoplectrum*). Minor items include lizards (mostly *Leiolopisma* and *Hoplodactylus*), fish, crayfish (*Paranephrops*), carrion, and rubbish. This general pattern is clear from natural surveys of gut contents backed up by field observations (taken from King and Murphy, 2005).

General Impacts
Introduced to New Zealand later than most other introduced predators (King 1984), after serious damage to native birds had already been done, stoats (*Mustela erminea*) contributed to the collective toll, especially in more remote areas of South Island (King and Murphy, 2005). *M. erminea* has been shown to be responsible for catastrophic losses of kiwi chicks in most years (see *Apteryx australis*; *Apteryx haastii*; *Apteryx mantelli*; and *Apteryx owenii* in IUCN Red List of Threatened Species) (Basse *et al*. 1999), and of hole-nesting forest birds in southern beech forests during periodic mouse irruptions (O'Donnell 1996). Once kiwi chicks reach a weight of around 800g they are able to defend themselves against stoats (McLennan *et al*. 2004) so kiwi nurseries have been set up where kiwi chicks are translocated to areas with heavy stoat control until they become large enough to defend themselves against stoats. Cost of research and management of stoats in New Zealand runs into millions of dollars a year.

Management Info
Preventative measures: Risk Assessment models for assessing the risk that exotic vertebrates could establish in Australia have been further explored by the Western Australia Department of Agriculture & Food (DAFWA) to confirm that they reasonably predict public safety, establishment and pest risks across a full range of exotic species and risk levels.
The Risk assessment for the Stoat (*Mustela erminea*), has been assigned a VPC Threat Category of **EXTREME**. Mammals and birds were assessed for the pest risk they pose if introduced to Australia, by calculating Vertebrate Pests Committee (VPC) Threat Categories. These categories incorporate risk of establishing populations in the wild, risk of causing public harm, and risk of becoming a pest (eg causing agricultural damage, competing with native fauna, etc). The 7-factor Australian Bird and Mammal Model was used for these assessments. \r\n
Trapping is widely used to remove stoats (*M. erminea*) from game estates in UK and conservation reserves in New Zealand. Trapping is effective when very intense, but is rapidly countered by immigration (McDonald & Harris 2002). Leg-hold traps are still legal for the moment, but likely to be banned in the forseeable future; the first humane trap, the \"Fenn\", developed in UK in the 1950s, was better but does not meet current standards. New, more humane traps, are being developed. There are no poisons currently registered for use against stoats, but they are often killed by secondary poisoning after operations targetting possums and rats.
Please follow this link to read more on the management of stoats compiled by the ISSG.

Pathway
Mustela erminea were introduced to Terschelling Is. (Netherlands) to control water voles (*Arvicola terrestris*), which are now extinct on that island (Van Wijngaarden *et al*. 1961).*Mustela erminea* were originally transported to rabbit-infested pastures in New Zealand for rabbit control.

Principal source: King, C. M. 1989: The natural history of weasels and stoats;
King, C.M. and Murphy, E.C. 2005. Stoat . In: The Handbook of New Zealand Mammals (ed C.M. King) pp. 261-287. Oxford University Press, Auckland.

Compiler: IUCN/SSC Invasive Species Specialist Group (ISSG)

Review:

Pubblication date: 2010-05-26

ALIEN RANGE

[1] DENMARK
[11] NEW ZEALAND

[1] NETHERLANDS

Red List assessed species 41: CR = 3; EN = 14; VU = 14; NT = 9; DD = 1;

Anarhynchus frontalis **VU**
Apteryx australis **VU**
Apteryx mantelli **EN**
Callaeas cinereus **EN**
Cyanoramphus auriceps **NT**
Cyanoramphus novaezelandiae **VU**
Diomedea sanfordi **EN**
Falco novaeseelandiae **NT**
Hemiphaga novaeseelandiae **NT**
Hymenolaimus malacorhynchos **EN**
Larus bulleri **EN**
Leiopelma pakeka **VU**
Anas chlorotis **EN**
Apteryx haastii **VU**
Apteryx owenii **NT**
Charadrius obscurus **EN**
Cyanoramphus malherbi **CR**
Cyanoramphus unicolor **VU**
Eudyptes pachyrhynchus **VU**
Gallirallus australis **VU**
Himantopus novaezelandiae **CR**
Lanius newtoni **CR**
Leiopelma hochstetteri **VU**
Megadyptes antipodes **EN**

Mohoua ochrocephala **EN**
Naultinus gemmeus **NT**
Nestor meridionalis **EN**
Oligosoma acrinasum **NT**
Phalacrocorax chalconotus **VU**
Plectrophenax hyperboreus **NT**
Porphyrio hochstetteri **EN**
Puffinus huttoni **EN**
Xenicus gilviventris **VU**
Mystacina tuberculata **VU**
Naultinus manukanus **DD**
Nestor notabilis **VU**
Oligosoma otagense **EN**
Philesturnus carunculatus **NT**
Poliocephalus rufopectus **VU**
Puffinus griseus **NT**
Sterna albostriata **EN**

BIBLIOGRAPHY

55 references found for **Mustela erminea**

Managment information

Agnew, D. 2003. Invasive Aliens Species Management in the Fiordland National Park - World Heritage Area (New Zealand). In: De Poorter, M. (Ed.). 2003. *Aliens* (17): 32-33.

Summary: Aliens is the bi-annual newsletter of the IUCN SSC Invasive Species Specialist Group (ISSG). Its role is to put researchers, managers and/or practitioners in contact with each other and to publish information and news of alien invasive species and issues.

Basse, B.; McLennan, J. A.; Wake, G. C. 1999: Analysis of the impact of stoats, *Mustela erminea*, on northern brown kiwi, *Apteryx mantelli*, in New Zealand. Wildlife Research 26: 227-237.

Summary: Impacts of stoats on Kiwi in New Zealand.

Bomford, M., 2003. Risk Assessment for the Import and Keeping of Exotic Vertebrates in Australia. Bureau of Rural Sciences, Canberra.

Summary: Available from: http://www.feral.org.au/wp-content/uploads/2010/03/PC12803.pdf [Accessed August 19 2010]

Christie, J.E., D.J. Brown, I. Westbrooke and E.C. Murphy., 2009. Environmental predictors of stoat (*Mustela erminea*) and ship rat (*Rattus rattus*) capture success. DOC Research & Development Series 305. Published by Publishing Team Department of Conservation PO Box 10420, The Terrace Wellington 6143, New Zealand

Summary: Abstract: The association between capture success of stoats (*Mustela erminea*) and ship rats (*Rattus rattus*) and landscape-scale environmental predictors was explored using trapping data from three stoat control areas located in podocarp/broadleaved forest in New Zealand. Stoat capture success was higher at trap sites where a rat was also captured at the same trap or a stoat was captured at a neighbouring trap. Drier trap sites with good soil drainage and increased proximity to the operational trapping boundary were also associated with increased stoat capture. Rat capture success was higher at trap sites where a rat had been captured at a neighbouring trap, and at trap sites that were on steeper ground, more easterly facing and within forest habitat. Trap sites with generally poor soil conditions, i.e. sites with lower soil calcium levels and wetter sites with poor drainage, and increasing distance from the forest edge were also associated with increased rat capture. There were highly variable relationships between rat and stoat capture and landscape-scale environmental predictors between the three stoat control areas. This could be due to differing topography, but also to the highly correlated nature of many of the topographic, climate and habitat predictors. Further research specifically designed to separate these effects should focus on the variables identified as common between all stoat control areas in this study. Additional investigations of whether rats captured in double trap sets act as additional bait for stoats would have practical benefits for stoat control areas. The variability of the results emphasises the importance of ensuring that traps are abundant and widespread in stoat control operations.

Clapperton, B.K. and Day, T.D. 2001. Cost-effectiveness of exclusion fencing for stoat and other pest control compared with conventional control, Department of Conservation Science Internal Series 14. Department of Conservation: Wellington.

Summary: Available from: http://www.doc.govt.nz/templates/page.aspx?id=39160 [Accessed 20 March 2007]

Clapperton, B.K., Robbins, L., Porter, R.E.R. and Tallentire, K. 2006. Testing the Attractiveness, Palatability and Longevity of Stoat Lure and Bait Formulations, Department of Conservation Research and Development Series 241. Department of Conservation: Wellington.

Summary: Available from: http://www.doc.govt.nz/upload/documents/science-and-technical/drds241.pdf [Accessed 20 March 2007]

Crouchley, D. 1994: Stoat control on Maud Island 1982-1993. Ecological Management 2: 39-45.

Summary: Management and control of stoats in New Zealand.

Crouchley, D; Derek Brown, Kerri-Anne Edge, Peter McMurtrie., 2007. Secretary Island Secretary Island Operational Plan: Deer Eradication Department of Conservation

Summary: Available from: http://www.doc.govt.nz/upload/documents/conservation/threats-and-impacts/animal-pests/secis-deer-eradication-report.pdf [Accessed 13 December 2007]

Department of Conservation (DOC) 2007. Southland Conservancy Conservation Management Planning Series Fiordland National Park Management Plan Published by Department of Conservation New Zealand

Summary: Available from: http://www.doc.govt.nz/templates/MultiPageDocumentTOC.aspx?id=44161 [Accessed 11 December 2007]

Dilks, P.J., O Donnell, C.F.J., Elliott, J.P. and Phillipson, S.M. 1996. The Effect of Bait Type, Tunnel Design, and Trap Position on Stoat Control Operations for Conservation Management, New Zealand Journal of Zoology 23: 295-306

Summary: Available from: http://www.rsnz.org/publish/nzjz/1996/109.pdf [Accessed 20 March 2007]

Dowding, J. E.; Murphy, E. C. 2001: The impact of predation by introduced mammals on endemic shorebirds in New Zealand: a conservation perspective. Biological Conservation 99: 47-64

Summary: Impacts of stoats on New Zealand forest birds.

Eason, C.T and Wickstrom, M. 1997. Vertebrate Pesticide Toxicology Manual (Poisons): Information on Poisons Used in New Zealand as Vertebrate Pesticides (2nd ed.), Department of Conservation Technical Series 23. Department of Conservation: Wellington.

Summary: Available from: http://www.doc.govt.nz/templates/page.aspx?id=39161 [Accessed 20 March 2007]

Elliott, G. P. 1996: Productivity and mortality of mohua (*Mohoua ochrocephala*). New Zealand Journal of Zoology 23: 229-237.
Summary: Impacts of stoat predation on New Zealand forest birds.
Environment Story, 7th Jan 2004. Massive stoat trapping operation planned for Egmont. Stuff National News.
Summary: Environment Story.
Fitzgerald, G., Fitzgerald, N. and Wilkinson, R. 2005. Social Acceptability of Stoats and Stoat Control Methods: A Survey of the New Zealand Public, Science for Conservation 253.
Summary: Available from: http://www.doc.govt.nz/upload/documents/science-and-technical/sfc253.pdf [Accessed 20 March 2007]
Gillies, C. and Williams, D. Undated. Using tracking tunnels to monitor rodents and mustelids.
Summary: This paper gives detailed information about how to use tracking tunnels.
Hamilton, B. 2004. Using colour to increase stoat (*Mustela erminea*) trap catch, Department of Conservation Science Internal Series 187. Department of Conservation: Wellington.
Summary: Available from: http://www.doc.govt.nz/upload/documents/science-and-technical/dsis187.pdf [Accessed 20 March 2007]
IUCN/SSC Invasive Species Specialist Group, 2007. Management- stoat
James, R.E., and M.N. Clout, 1996. Nesting success of New Zealand pigeons (*Hemiphaga novaeseelandiae*) in response to a rat (*Rattus rattus*) poisoning programme at Wenderholm Regional Park. New Zealand Journal of Ecology 20(1): 45-51 ©New Zealand Ecological Society
Summary: Available from: http://www.newzealandecology.org/nzje/free_issues/NZJEcol20_1_45.pdf [Accessed December 11 2007]
King, C.M.. 1983. *Mustela erminea* . Mammalian Species, No. 195, pp. 1-8.
Summary: In depth information about stoats mainly focussing on native range
King, C. M. 1984: Immigrant killers: introduced predators and the conservation of birds in New Zealand. Auckland, New Zealand, Oxford University Press.
Summary: A summary of literature available on introduced predators up to 1983. Historical descriptions still useful; management chapter shows how much has changed in 20 years
King, C.M. 1994. Monitoring and Control of Mustelids on Conservation Lands: Part 1: Planning and Assessing an Operation, Department of Conservation Technical Series No. 3. Department of Conservation: Wellington.
Summary: Available from: http://www.doc.govt.nz/upload/documents/science-and-technical/docts03.pdf [Accessed 20 March 2007]
King, C.M., O Donnell, C.F.J. and Phillipson, S.M. 1994. Monitoring and Control of Mustelids on Conservation Lands: Part 2: Field and Workshop Guide, Department of Conservation Technical Series No. 3. Department of Conservation: Wellington
Lawrence, B.L. and O©Donnell, C.F.J. 1999. Trap Spacing and Layout: Experiments in Stoat Control in the Dart Valley, 1992-95, Science for Conservation 118.
Summary: Available from: http://www.doc.govt.nz/upload/documents/science-and-technical/SFC118.pdf [Accessed 20 March 2007]
Littin, K.E. and Mellor, D.J. 2005. Strategic Animal Welfare Issues: Ethical and Animal Welfare Issues Arising From the Killing of Wildlife for Disease Control and Environmental Reasons, Rev. sci. tech. Off. int. Epiz. 24 (2): 767-782.
Summary: Available from: https://www.oie.int/eng/publicat/rt/2402/PDF/littin767-782.pdf [Accessed 20 March 2007]
Lovegrove, T. G., C. H. Zeiler, B. S. Greene, B. W. Green, R. Gaastra, and A. D. MacArthur., 2002. Alien plant and animal control and aspects of ecological restoration in a small mainland island : Wenderholm Regional Park, New Zealand. In *Turning the tide: the eradication of invasive species*: 155-163. Veitch, C.R. and Clout, M.N.(eds). IUCN SSC Invasive Species Specialist Group. IUCN. Gland. Switzerland and Cambridge. UK.
Summary: Eradication case study in Turning the tide: the eradication of invasive species.
Massam M, Kirkpatrick W and Page A., 2010. Assessment and prioritisation of risk for forty introduced animal species. Invasive Animals Cooperative Research Centre, Canberra.
Summary: This report documents work contributing to a project commissioned by the Invasive Animals Cooperative Research Centre to validate and refine risk assessment models used in decisions to import and manage introduced vertebrate species. The intent of the project was to: a) increase predictive accuracy, scientific validation and adoption of risk assessment models for the import and keeping of exotic vertebrates, and b) reduce the risk of new vertebrate pests establishing introduced populations in Australia.
Available from: http://www.feral.org.au/wp-content/uploads/2010/08/DAFWA_RA_060510.pdf [Accessed 16 March 2011]
McDonald, R. A. and Harris, S. 2002. Population Biology of Stoats *Mustela erminea* and Weasels *Mustela nivalis* on Game Estates in Great Britain, Journal of Applied Ecology 39: 793-805.
McDonald, R.A. and Lariviere, S. 2001. Diseases and Pathogens of *Mustela* spp., With Special Reference to the Biological Control of Introduced Stoat *Mustela erminea* Populations in New Zealand, Journal of The Royal Society of New Zealand 31 (4): 721-744.
Summary: Available from: http://www.rsnz.org/publish/jrsnz/2001/38.pdf [Accessed 20 March 2007]
McLennan, J. A.; Potter, M. A.; Robertson, H. A.; Wake, G. C.; Colbourne, R.; Dew, L.; Joyce, L.; McCann, A. J.; Miles, J.; Miller, P. J.; Reid, J. 1996: Role of predation in the decline of kiwi, Apteryx spp., in New Zealand. New Zealand Journal of Ecology 20: 27-35)
Summary: Impacts of stoat predation on kiwi.
Moorhouse, R.; Greene, T.; Dilks, P. J.; Powlesland, R. G.; Moran, L.; Taylor, G.; Jones, A.; Knegtmans, J. W.; Wills, D.; Pryde, M.; Fraser, I.; August, A.; August, C. 2003: Control of introduced mammalian predators improved kaka *Nestor meridionalis* breeding success: reversing the decline of a threatened New Zealand parrot. Biological Conservation 110: 33-44.
Summary: Control and management of stoats in New Zealand.
Murphy, E. C.; Fechney, L. 2003: What s happening with stoat research? Fifth report on the five year stoat-research programme. Wellington, Department of Conservation. pp.
Summary: Status of and issues with stoat predation research in New Zealand.
Murphy, E.C., L. Robbins., J.B.Young and J.E. Dowding., 1999. Secondary poisoning of stoats after an aerial 1080 poison operation in Pureora forest, New Zealand. New Zealand Journal of Ecology 23(2): 175-182 ©New Zealand Ecological Society
Summary: Available from: http://www.newzealandecology.org/nzje/free_issues/NZJEcol23_2_175.pdf [Accessed 11 December 2007]
O Donnell, C. F. J. 1996: Predators and the decline of New Zealand forest birds: an introduction to the hole-nesting bird and predator programme. New Zealand Journal of Zoology 23: 213-219.
Summary: Impacts of stoats on New Zealand forest birds.

Page, Amanda; Win Kirkpatrick and Marion Massam, July 2008, Stoat (*Mustela erminea*) risk assessment for Australia. Department of Agriculture and Food, Western Australia.
Summary: Models for assessing the risk that exotic vertebrates could establish in Australia have been developed for mammals, birds (Bomford 2003; Bomford 2006, 2008), reptiles and amphibians (Bomford 2006, 2008; Bomford *et al*. 2005). These Risk Assessment models have been further explored by Western Australia Department of Agriculture & Food (DAFWA) to confirm that they reasonably predict public safety, establishment and pest risks across a full range of exotic species and risk levels. Mammals and birds were assessed for the pest risk they pose if introduced to Australia, by calculating Vertebrate Pests Committee (VPC) Threat Categories. These categories incorporate risk of establishing populations in the wild, risk of causing public harm, and risk of becoming a pest (eg causing agricultural damage, competing with native fauna, etc). The 7-factor Australian Bird and Mammal Model was used for these assessments.
Ragg, J.R. and Clapperton, B.K. 2004. Ferret Control Manual. (Prepared for: Animal Health Board, Wellington).
Summary: Available from: http://www.ahb.org.nz/NR/rdonlyres/D86FEEE4-FA9C-4F1D-A6EC-6F519015D001/114/R80596FerretControlManual.pdf [Accessed 20 March 2007]
Robbins, L., Clapperton, B.K., Tallentire, K. and Porter, R.E.R. 2007. Testing the Attractiveness and Palatability of Stoat Lures and Baits With Various Sensory Cues, Department of Conservation Research and Development Series 265. Department of Conservation: Wellington
Summary: Available from:http://www.doc.govt.nz/upload/documents/science-and-technical/drds265.pdf [Accessed 20 March 2007]
Smith, D. and Jamieson, I.G. 2003. Movement, Diet, and Relative Abundance of Stoats in an Alpine Habitat, Department of Conservation Science Internal Series 107. Department of Conservation: Wellington.
Summary: Available from: http://www.doc.govt.nz/upload/documents/science-and-technical/DSIS107.pdf [Accessed 20 March 2007]
Spurr, E.B., O'Connor, A.T., Airey, A.T. and Kerr, J.H. 2002. FeraCol for the Control of Stoats (*Mustela erminea*), Department of Conservation Internal Series 61. Department of Conservation: Wellington.
Summary: Available from: http://www.doc.govt.nz/upload/documents/science-and-technical/DSIS61.pdf [Accessed 20 March 2007]
Tasman District Council (TDC) 2001. Tasman-Nelson Regional Pest Management Strategy
Van Wijngaarden, A.; M�rzer Bruijns, M. F. 1961: The ermine *Mustela erminea* L., on the island of Terschelling. Lutra 3: 35-42.
Summary: Notes on introduction of stoats to the island of Terschelling.
Veitch, C. R., 2002c. Eradication of Norway rats (*Rattus norvegicus*) and house mouse (*Mus musculus*) from Browns Island (Motukorea), Hauraki Gulf, New Zealand. In *Turning the tide: the eradication of invasive species*: 381-388. Veitch, C.R. and Clout, M.N.(eds). IUCN SSC Invasive Species Specialist Group. IUCN. Gland. Switzerland and Cambridge. UK.
Summary: Eradication case study in Turning the tide: the eradication of invasive species.
Warburton, B. and O'Connor, C. 2004. Research on Vertebrate Pesticides and Traps: Do Wild Animals Benefit? In: Research on Animals for Animal Benefit, Fourth World Congress, ATLA (Alternatives to Laboratory Animals) 32 (Supplement 1): 229�234
Zavaleta, E.S., 2002. It s often better to eradicate, but can we eradicate better? In *Turning the tide: the eradication of invasive species:* 381-388. Veitch, C.R. and Clout, M.N.(eds). IUCN SSC Invasive Species Specialist Group. IUCN. Gland. Switzerland and Cambridge. UK.

General information

BirdLife International 2007. Species factsheet: *Xenicus gilviventris*.
Summary: Available from: http://www.birdlife.org/datazone/species/index.html?action=SpcHTMDetails.asp&sid=3992&m=0 [Accessed 14 December 2007]
BirdLife International 2008. *Nestor notabilis*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.2
Summary: Available from: http://www.iucnredlist.org/apps/redlist/details/106001410/0 [Accessed 16 December 2012]
Elliott, G. P.; Dilks, P. J.; O Donnell, C. F. J. 1996: The ecology of yellow-crowned parakeets (*Cyanoramphus auriceps*) in Nothofagus forest in Fiordland, New Zealand. New Zealand Journal of Zoology 23: 249-265.
ITIS (Integrated Taxonomic Information System), 2005. Online Database *Mustela erminea*
Summary: An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.
Available from: http://www.cbif.gc.ca/pls/itisca/taxastep?king=every&p_action=containing&taxa=Mustela+erminea&p_format=&p_ifx=plglt&p_lang= [Accessed March 2005]
King, C. M. 1989: The natural history of weasels and stoats. London, Christopher Helm. (2nd edition submitted to Cornell University Press, January 2004)
Summary: A comprehensive description of the biology of stoats and weasels. Now out of print, but a new edition was submitted in January 2004 for publication by Cornell University Press, date not yet determined.
King, C.M. 1990. (Ed) The Handbook of New Zealand Mammals, 1st Edition. Oxford University Press, Auckland, pp 600.
Summary: 2nd edition due to be published by Oxford University Press, Mebourne, in 2005.
King, C.M. and Murphy, E.C. 2005. Stoat . In: The Handbook of New Zealand Mammals (ed C.M. King) pp. 261-287. Oxford University Press, Auckland.
King, C.M., and Powell, R.A. 2006. The Natural History of Weasels and Stoats: Ecology, Behaviour and Management, 2nd edition. Oxford University Press, New York, pp 446.
Summary: A comprehensive description of the biology of stoats and weasels.
King, C. M.; White, P. C. L.; Purdey, D.; Lawrence, B. 2003: Matching productivity to resource availability in a small predator, the stoat (*Mustela erminea*). Canadian Journal of Zoology 81: 662-669.
Long, John. L., 2003. Introduced Mammals of the World Their History, Distribution and Influence. CSIRO Publishing
McDonald, R. A.; Harris, S. 2002: Population biology of stoats *Mustela erminea* and weasels *Mustela nivalis* on game estates in Great Britain. Journal of Applied Ecology 39: 793-805.