

## **Curriculum Vitae: Pieter W. Kat**

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Citizenship – Netherlands

### Education:

1971-1975	University of Rochester, NY	BS (Biology/Geology)
1975-1978	University of Delaware, DE	MS (Marine Biology)
1979	Johns Hopkins University, MD	MA (Ecology & Evolution)
1979-1983	Johns Hopkins University, MD	PhD (Ecology & Evolution)

### Experience:

1984-1993	Head, Department of Malacology & Genetics, National Museums of Kenya, Nairobi and Senior Research Scientist, Biology Section
1988-1990	Advisor, Global Environment Small Grants Program, UNEP
1993-1994	Research Scientist, Veterinary School, University of California, Davis
1994-1995	Research Scientist, US Centers for Disease Control, Atlanta
1995-2006	Director, Okavango Lion Research Program, Botswana

### Partial publication list:

**Kat PW.** 1981. Shell shape changes in Gastropoda: shell decollation in *Rumina decollata* (Pulmonata: Subulinidae). *Veliger* 24(2):115-119.

**Kat PW.** 1982. Effects of population density and substratum type on growth and migration of *Elliptio complanata* (Bivalvia: Unionidae). *Malacol. Rev.* 15:119-27.

**Kat PW.** 1982. Relationship between heterozygosity for enzyme loci and developmental homeostasis in peripheral populations of aquatic bivalves (Unionidae). *Amer. Nat.* 119: 824-832.

**Kat PW.** 1982. Reproduction in a peripheral population of *Cyrenoida floridana* (Bivalvia: Cyrenoididae). *Malacologia* 23: 47-54.

- Kat PW.** 1982. Shell dissolution as a significant cause of mortality for Corbicula fluminea (Bivalvia, Corbiculidae) inhabiting acidic waters. *Malacol. Rev.* 15: 129-134.
- Kat PW.** 1983. Genetic and morphological divergence among nominal species of North American Anodontida (Bivalvia, Unionidae). *Malacologia* 23: 361-374.
- Kat PW.** 1983. Sexual selection and simultaneous hermaphroditism among the Unionidae (Bivalvia: Mollusca). *J. Zool., Lond.* 201: 395-416.
- Kat PW.** 1983. Conchiolin layers among the Unionidae and Margaritiferidae (Bivalvia) – microstructural characteristics and taxonomic implications. *Malacologia* 24: 298-311.
- Kat PW.** 1983. Fossil evidence from Fish House clays for the origin and changes in species composition through time of the northern Atlantic Slope Unionid fauna (Mollusca: Bivalvia). *Proc. Acad. Nat. Sci. Phil.* 135: 85-101.
- Kat PW.** 1983. Morphological divergence, genetics, and speciation among Lampsilis (Bivalvia, Unionidae). *J. Moll. Stud.* 49: 133-145
- Kat PW.** 1983. Patterns of electrophoretic and morphological variation in a widely distributed unionid – an initial survey. *Neth. J. Zool* 33: 21-40.
- Kat PW,** GM Davis. 1984. Molecular genetics of peripheral populations of Nova Scotian Unionidae (Mollusca, Bivalvia). *Biol. J. Linn Soc.* 22: 157-185.
- Kat PW.** 1984. Parasitism and the Unionacea (Bivalvia). *Biol. Rev.* 59: 189-207.
- Kat PW,** GM Davis 1984. Speciation of mollusks from Turkana basin. *Nature* 304: 660-661.
- Signor PW III, **PW Kat.** 1984. Functional significance of columellar folds in turritelliform gastropods. *J. Paleontol.* 58: 210–216
- Kat PW.** 1985. Historical evidence for fluctuation in levels of hybridization. *Evolution* 39: 1164-1169.
- Kat PW.** 1985. Convergence in bivalve conchiolin layer microstructure. *Malacol. Rev.* 18: 97-106.
- Kat PW.** 1986. Hybridization in a unionid faunal suture zone. *Malacologia* 27: 107-125.

**Kat PW.** 1987. Biogeography and evolution of African freshwater mollusks: implications of a Miocene assemblage from Rusinga Island, Kenya. *Palaeontology* 30: 733-742.

Fuller, TK, AR Biknevicius, **PW Kat.** 1988. Home range of an African wild cat, *Felis silvestris* (Schreber) near Elmenteita, Kenya. *Z. Säugetierk.* 53:380-381.

Wayne, RK, B Van Valkenburgh, **PW Kat.**, TK Fuller, WE Johnson, SJ O'Brien. 1989. Genetic and morphologic divergence among sympatric canids. *J. Hered.* 80: 447-454.

Fuller TK, AR Biknevicius, **PW Kat.**, BV Valkenburgh, RK Wayne. 1989. The ecology of three sympatric jackal species in the Rift Valley of Kenya. *Afr. J. Ecol.* 27: 313-323.

Wayne, RK, B Van Valkenburgh, **PW Kat.**, TK Fuller, WE Johnson, SJ O'Brien. 1989. Genetic and morphologic divergence among sympatric canids. *J. Hered.* 80: 447-454.

Wayne RK, A Meyer, N Lehman, B Van Valkenburg, **PW Kat.**, TK Fuller, D Girman, SJ O'Brien. 1990. Large sequence divergence among mitochondrial DNA genotypes within populations of east African black-backed jackals. *Proc. Natl. Acad. Sci USA* 87: 1772-1776.

Fuller TK, **PW Kat.** 1990. Movements, activity and prey relationships of African wild dogs (*Lycaon pictus*) near Aitong, southwestern Kenya. *Afr. J. Ecol.* 28: 330-350.

Georgiadis N, **PW Kat.** 1990. Gnu races across the Rift Valley. *Swara* 25: 21-23

Georgiadis N, **PW Kat.**, H Oketch, J Patton. 1990. Allozyme divergence within the Bovidae. *Evolution* 44: 2135-2149.

Fuller TK, AR Biknevicius, **PW Kat.** 1990. Movements and behavior of large spotted genets (*Genetta maculata* Gray 1830) near Elmenteita, Kenya (Mammalia Viverridae). *Trop. Zool.* 3: 13-19.

**Kat PW**, S Njuguna, J Grootenhuis. 1990. Wildlife research for sustainable development. *Swara* 26: 12-14.

Grootenhuis, JG, SG Njuguna, **PW Kat.** (Eds) 1991. Wildlife Research for Sustainable Development: Proceedings of an International Conference held by the Kenya Agricultural Institute. Nairobi.

Michel AE, AS Cohen, KA West, MR Johnston, **PW Kat**. 1992. Large African Lakes as Natural Laboratories for Evolution: Examples from the Endemic Gastropod Fauna of Lake Tanganyika. *Mitt. Internat. Verein. Limnol.* 23:85-99.

Fuller, TK, **PW Kat**, JB Bulger, AH Maddock, JR Ginsberg, R Burrows, JW McNutt, MGL Mills. 1992. Population dynamics of African wild dogs. In: *Wildlife 2001: Populations* (Ed. D.R.McCullough & H.Barrett), London: Elsevier Science Publishers.

Alexander, KA, **PW Kat** 1992. *African wild dog distribution in Kenya*. Workshop on the Conservation & Recovery of the African Wild Dog, *Lycaon pictus*, Arusha, Tanzania.

Fuller TK, MGL Mills, M Borner, K Laurenson, **PW Kat** 1992. Long distance dispersal by African wild dogs in East and South Africa. *J. Afr. Zool.* 106: 535-537.

Alexander, KA, PA Conrad, IA Gardner, C Parish, M Appel, MG Levy, N. Lerche, **PW Kat**. 1993. Serologic survey for selected microbial pathogens in African wild dogs (*Lycaon pictus*) and sympatric domestic dogs (*Canis familiaris*) in Masai Mara, Kenya. *J. Zoo Wildl. Med.* 24: 140-144.

Girman, DJ, **PW Kat**, MG Mills, JR Ginsberg, M Borner, V Wilson, JH Fanshawe, C Fitzgibbon, LM Lau, RK Wayne. 1993. Molecular genetic and morphological analyses of the African wild dog (*Lycaon pictus*). *J. Hered.* 84: 450-459.

Alexander KA, NJ MacLachlan, **PW Kat**, C House, SJ O'Brien, NW Lerche, M. Sawyer, LG Frank, K. Holekamp, L. Smale et al. 1994. Evidence of natural bluetongue virus infection among African carnivores. *Am. J. Trop. Med. Hyg.* 51: 568-576.

Alexander KA, **PW Kat**, RK Wayne, TK Fuller. 1994. Serologic survey of selected canine pathogens among free-ranging jackals in Kenya. *J. Wildl. Dis.* 30: 486-491.

Alexander KA, **PW Kat**, LG Frank, KE Holekamp, L Smale, C. House, MJG Appel. 1995. Evidence of canine distemper virus infection among free-ranging spotted hyenas (*Crocuta crocuta*) in the Masai Mara, Kenya. *J. Zoo Wildl. Med.* 26 201-206.

**Kat PW**, KA Alexander, JS Smith, L Munson. 1995. Rabies and African wild dogs in Kenya. *Proc. Biol. Sci.* 262: 229-233.

Alexander KA, **PW Kat**, J House, C House, SJ O'Brien, MK Laurenson, JW McNutt, BI Osburn. 1995. African horse sickness and African carnivores. *J. Vet. Microbiol.* 47: 133-140.

Osburn BI, **PW Kat**. 1995. Orbiviruses in Southern Africa and North America: a comparative overview. In: Joint Southern African – United States Orbivirus Workshop. Strategies for Orbivirus Research, Control and Trade for the Year 2000.

Fuller TK, TH Nicholls, **PW Kat**. 1995. Prey and estimated food consumption of African wild dogs in Kenya. *S. Afr. J. Wildl. Res.* 25: 106-110.

Ginsberg, JR, KA Alexander, S Creel, **PW Kat**, JW McNutt, MGL Mills. 1995. Handling and survivorship of African wild dog (*Lycaon pictus*) in five ecosystems. *Cons. Biol.* 9: 665-674

**Kat PW**, KA Alexander, JS Smith, JD Richardson, L. Munson. 1996. Rabies among African wild dogs (*Lycaon pictus*) in the Masai Mara, Kenya. *J. Vet. Diagn. Invest.* 8: 420-426.

Alexander, KA, **PW Kat**, LA Munson, A Kalake, MJG Appel. 1996. Canine distemper-related mortality among wild dogs (*Lycaon pictus*) in Chobe National Park, Botswana. *J. Zoo Wildl. Med.* 27: 426-427.

House, C, KA Alexander, **PW Kat**, SJ O'Brien, J Mangiafico. 1996. Serum antibody to Rift Valley fever virus in African carnivores. *Ann. NY Acad. Sci.* 791:345-9.

Arctander, P, **PW Kat**, RA Aman, HR Siegismund. 1996. Extreme genetic differences among populations of *Gazella granti*, Grant's gazelle, in Kenya. *Heredity* 76: 465-475.

House, C, KA Alexander, **PW Kat**, SJ O'Brien, J. Mangiafico. 1996. Serum antibody to Rift Valley fever virus in African carnivores. *Ann. NY Acad. Sci.* 791: 345-349.

Arctander, P, **PW Kat**, BT Simonsen, HR Siegismund. 1996. Population genetics of Kenyan impalas - consequences for conservation. In Wayne, R.K. & Smith, T.B. (eds.) Molecular genetics in conservation. Oxford University Press, Oxford.

**Kat PW**, C Harvey. 2000. Prides: The Lions of Moremi. Washington, DC: Smithsonian Institution Press.

Girman DJ, C. Vila, E. Geffen, S. Creel, MG Mills, JW McNutt, J Ginsberg, **PW Kat**, KH Mamiya, RK Wayne. 2001. Patterns of population subdivision, gene flow and genetic variability in the African wild dog (*Lycaon pictus*). *Mo. I Ecol.* 10:1703-1723.

**Kat PW** 2002. *Male movements, territories, and lion mortality in the Okavango region. Proceedings of the National Strategic Conference on Predator Conservation and Management.* KCS and DWNP, Gaborone, Botswana.

Lorenzen ED, BT Simonsen, **PW Kat**, P Arctander, HR Siegismund. 2006. Hybridization between subspecies of waterbuck (*Kobus ellipsiprymnus*) in zones of overlap with limited introgression. *Mol. Ecol.*

Nicholls K, JL Ward, **PW Kat**. African lion trophy hunting policy cannot be based on a site-specific model. Submitted, *J. Zool., Lond.*

Nicholls K, JL Brown, **PW Kat**. Reproduction in free-ranging lions (*Panthera leo*) assessed by fecal steroid analysis. Submitted *Cons. Biol.*