

Dr. Carsten Nowak Curriculum Vitae 01/2017

Current Affiliation	Conservation Genetics Section Senckenberg Research Institutes and Natural History Museums Clamecystraße 12, 63571 Gelnhausen, Germany email cnowak@senckenberg.de phone +49-6051-619543122, fax +49-6051-619543118 www.senckenberg.de/conservationgenetics www.bik-f.de
Personal Data	born May 15 th 1977 in Offenbach am Main, Germany married, two children
Professional Interests	Population Genetics, Conservation Biology, Evolutionary Ecology, Global Change Biology, Wildlife Management

Scientific Career

10/08-06/14	Project group leader and co-coordinator of project area <i>Adaptation and Climate</i> , Biodiversity and Climate Research Centre (BiK-F), Frankfurt am Main
since 03/08	Head of Conservation Genetics Section, Senckenberg Research Institute and Natural History Museum Frankfurt, Research Station Gelnhausen; Coordinator of national reference centre for large carnivore genetics since 01/2010
03/07- 02/08	Research associate at the Centre for Aquatic Conservation, Department of Biological Sciences, University of Notre Dame, USA, working in the groups of Profs David M. Lodge & Jessica J. Hellmann
09/03- 02/07	PhD candidate at the Department of Ecology and Evolution, Goethe-University Frankfurt am Main. Thesis titled <i>Consequences of Environmental Pollution on Genetic Diversity of the midge Chironomus riparius</i> ; with highest distinctions (<i>summa cum laude</i>)
05/03	Diploma degree with highest distinctions (1.0) in Biology (ecology, genetics, systematic zoology) at the Goethe-University Frankfurt am Main

Scientific & Societal Service

- Member of the „Dokumentations- und Beratungsstelle des Bundes zum Thema Wolf“ (DBBW) (since 12/2015)
- Coordinator of the national reference center for genetic analyses of large carnivores (since 01/2010)
- Organizer of scientific conferences and workshops (86th annual conference of the German Society of Mammalogy “The Past, Present, and Future of Mammalian Diversity”, Senckenberg Natural History Museum, Frankfurt am Main 2012; 2nd Meeting of the European Wildcat Consortium, Gelnhausen 2014; 1st CEwolf consortium meeting, Gelnhausen 2014)
- Providing genetic species identification service with >15.000 species identifications for NGOs, conservation agencies, citizen scientists and research institutions (2008- ongoing)
- Founding member of the Central European Wolf Genetics Consortium (CEwolf, www.senckenberg.de/cewolf)
- Member of the National Park and UNESCO world heritage site Kellerwald-Edersee advisory council
- Regular environmental education activities and open events for school classes, students, and the public at the Gelnhausen Research Station & involvement in citizen science projects (e.g., Wildkatzensprung, www.bund.net/wildkatzensprung)
- Hosting of international students in the frame of the Minority Health and Health Disparities International Research Training (MHIRT) program of the University of California at Santa Cruz, USA
- Author or coauthor on >140 conference contributions and public talks.

Teaching & Supervision

PhD Theses

- Joao Pedrosa, Universidade de Aveiro, Portugal, with Prof. A. Soares (2012-2016 expected)

Master/Diploma Theses

- Marc Büntjen, Philipps-Universität Marburg, with Prof. L. Beck (2009): Entwicklung eines nichtinvasiven genetischen Markersystems zur Identifikation europäischer Säugetiere
- Michael Bauer, Ernst-Moritz-Arndt-Universität Greifswald, with Prof. K. Fischer (2011): Development of an eDNA based method for highly sensitive detection of freshwater species
- Stefanie Hartmann, Ernst-Moritz-Arndt-Universität Greifswald, with Prof. K. Fischer (2011): Regional population structure of the European wildcat (*Felis silvestris*) - a landscape genetics approach

- Thorsten Haver, Justus-Liebig-Universität Gießen, with Prof. V. Wolters (2012): Gefährdungspotential, Erhaltungszustand und der räumliche Effekt von Schutzmaßnahmen für den Feldhamster (*Cricetus cricetus*) in Hessen.
- Melanie Albert, Justus-Liebig-Universität Gießen, with Prof. V. Wolters (2013): Erfassung des Reproduktionserfolges des Feldhamsters (*Cricetus cricetus*) in Hessen.
- Martina Buhrmester, Philipps-Universität Marburg, with Prof. L. Beck (2013): Stable, noninvasive methods for species distinction in *Canis* sp.
- Michel Schleenbecker, Justus-Liebig-Universität Gießen, with Prof. V. Wolters (2014): Verbesserung von Methoden zur Bestimmung von Populationsgrößen und Bestandsentwicklungen bei Feldhamstern.

Theses performed in my group with external supervision

- Melanie Fuchs, Bachelor thesis, Goethe-Universität Frankfurt, Prof. A. Janke (2014)
- Katharina Steyer, Diploma thesis, Goethe-Universität Frankfurt, Prof. B. Streit (2009)
- Laura Tippel, Diploma thesis, Gutenberg-Universität Mainz, Prof. J. Kadereit (2011)
- Susanne Carl, Diploma thesis, Goethe-Universität Frankfurt, Prof. B. Streit (2011)
- Claudia Herröder, Diploma thesis, Goethe-Universität Frankfurt, Prof. B. Streit (2012)
- Timo Talke, Master thesis, Goethe-Universität Frankfurt, Prof. B. Streit (2016- open)
- Anna Kasperkiewicz, Master thesis, Goethe-Universität Frankfurt, Prof. A. Janke (2016)
- Katharina Reinert, Master thesis, Goethe-Universität Frankfurt, Prof. Hickler (2016- open)
- Jutta Geismar, PhD thesis, Goethe-Universität Frankfurt, Prof. P. Haase (2010-open)
- Christiane Frosch, PhD thesis, Goethe-Universität Frankfurt, Prof. M. Pfenninger (2010-14)
- Verena Harms, PhD thesis, Goethe-Universität Frankfurt, Prof. A. Janke (2010- open)
- Katharina Steyer, PhD thesis, Goethe-Universität Frankfurt, Prof. B. Streit (2011-17)
- Claudia Wittwer, PhD thesis, Goethe-Universität Frankfurt, Prof. M. Thines (2013- 2017)
- Annika Tiesmeyer, PhD thesis, Goethe-Universität Frankfurt, Prof. M. Pfenninger (2014- open)
- Anne Jarausach, PhD thesis, Goethe-Universität Frankfurt, Prof. T. Müller (2015-open)
- Alina von Thaden, PhD thesis, Goethe-Universität Frankfurt, Prof. A. Janke (2015- open)
- Tobias E Reiners, PhD thesis, Goethe-Universität Frankfurt, Prof. A. Janke (2012-16 expected)

Courses

- Master module *Evolutionsbiologie aquatischer Organismen*, Goethe-Universität Frankfurt, FB Biowissenschaften, 5 weeks, 2010, 2014.
- Undergraduate module with field excursions *Diversität der Organismen und Lebensräume*, Goethe-Universität Frankfurt, FB Biowissenschaften, 2015, 2016.
- Regular offer of practical courses, both university and non-university; hosting students and young scientists from various universities and institutions: Barcelona (Autonomous University), Budapest (Natural History Museum), Fairfax (George Mason University), Frankfurt, Gießen, Greifswald, Leipzig, Mainz, Marburg, Murcia, Porto (CIBIO), Salt Lake City (University of Utah), Tlemcen (Algeria), Tunis (El Manar University), Vienna (Boku), Würzburg

Grants (€ 3,88 M since 2008)

- Entwicklung eines Konzepts zur Übertragung von Daten aus dem genetischen Monitoring der Wildkatze für den FFH-Bericht 2019 (2016)
- Estimating genetic and demographic parameters of the Romanian wolf population, WOLFLIFE project (LIFE13NAT/RO/000205) (2015-2017)
- eDNA-basierter Nachweis von Maifischen, HIT-Umwelt- und Naturschutzstiftung, with Dr. Stefan Stoll (2014)
- Entwicklung, Etablierung und Anwendung einer kostengünstigen, flächendeckend einsetzbaren Methode zur Detektion der Krebspest mittels environmental DNA, with Dr. Stefan Stoll & Prof. Marco Thines (2014)
- Erfassung und Reproduktionserfolg beim Feldhamster in Hessen. Deutsche Wildtierstiftung, with Tobias E Reiners (2014)
- Genetische Untersuchungen zur Herkunftsanalyse der hessischen Fischottervorkommen. Regierungspräsidium Darmstadt (2014)
- Entwicklung einer Gendatenbank für die Wildkatze. Bundesprogramm Biologische Vielfalt (2012-2017), with Lothar Menner & Bund für Umwelt und Naturschutz Deutschland (BUND)
- Development and implementation of genetic methods for determination of the status of the wild animals: Brown bear, wolf, lynx, and wild cat. Bulgarian Ministry of the Environment (2012-2014)
- Experimentelle Populationsgenomik der lokalen Adaptation von *Chironomus riparius*, Deutsche Forschungsgemeinschaft (DFG), with Prof. Markus Pfenninger & Prof. Tom Hankeln (2013)
- Wildkatzensprung* – Genetisches Begleitmonitoring im Rahmen des BUND-Projekts zum Schutz der Wildkatze in Deutschland. Bundesprogramm Biologische Vielfalt (2012-2017)
- Development and application of microsatellite markers for the Saiga antelope. Royal Society for the Protection of Birds (2012)
- Genetische Analyse von Haselhühnern (*Bonasa bonasia*) zur Unterscheidung von Unterarten. Staatliche Vogelwarte Frankfurt am Main (2012)
- Inferring genetic patterns of ongoing recolonization of Central Europe by elusive, large carnivores using novel SNP marker systems for noninvasive samples. SAW Research Initiative of the Leibniz Gemeinschaft (2011-2014)
- Using hair traps for genetic beaver monitoring in Hesse. Regierungspräsidium Darmstadt (2011)
- Importance of genetic diversity for populations under climate change. Hessian Initiative for Excellence in Economy & Science (LOEWE) (2011-2014)
- Development of a genetic detection system for predator identification from kills. Hessian Ministry of Environment and Agriculture (HMUELV) (2010)
- Genetic large carnivore monitoring in Germany. Diverse funding sources (2010-ongoing)
- Estimating losses in genetic diversity under climate change. Hessian Initiative for Excellence in Economy & Science (LOEWE) (2009)
- Development of a genetic marker system for non-invasive assessment of dispersal, relatedness and hybridization in the European beaver. Regierungspräsidium Darmstadt (2009)
- DNA-based population size estimation of wildcats in the Taunus mountain range. FENA (2009)
- A Bayesian model based approach for the assessment of dispersal in aquatic insects. Deutsche Forschungsgemeinschaft (DFG), with Prof. Peter Haase (2009-2012)

Molecular taxonomy of the Egyptian goose (*Alopochen aegyptiacus*). Hessian Ministry of Environment and Agriculture (HMUELV), 2,000 € (2009)

Assessing the genetic population structure of montane insects – a global change genetic approach (BiK-F project code C5.2). Hessian Initiative for Excellence in Economy & Science (LOEWE), 150,000 € (2009-2012)

Wildlife genotyping service. Diverse funding sources, 885,000 €, (2008-ongoing)

ISI Publications (GoogleScholar H = 19, 1340 citations as of August 15 2017)

63. Von Thaden, Cocchiararo B, Jarausch A, Jüngling H, Karamanlisis AA, Tiesmeyer A, **Nowak C**, Munoz-Fuentes V: Assessing SNP genotyping of noninvasively collected wildlife samples using microfluidic arrays. *Nature Scientific Reports*, accepted.

62. Bayerl H, Kraus RHS, **Nowak C**, Foerster DW, Fickel J, Kuehn R: Fast and cost-effective single nucleotide polymorphism (SNP) detection in the absence of a reference genome using semi-deep next generation random amplicon sequencing (RAMseq). *Molecular Ecology Resources*, accepted.

61. Steyer K, Tiesmeyer A, Munoz-Fuentes V, **Nowak C**: Low rates of hybridization between European wildcats and domestic cats in a human dominated landscape. *Ecology & Evolution*, accepted.

60. Eddine A, Mostefai N, De Smet K, Klees D, Ansorge H, Karssene Y, **Nowak C**, Van Der Leer P: Diet composition of a newly recognized canid species, the African golden wolf (*Canis anthus*), in northern Algeria. *Annales Zoologici Fennici* 54, 347-356.

59. Pedrosa J, Cocchiararo B, Verdelhos T, Soares AM, Pestana JLT, **Nowak C** (2017) Population genetic structure and hybridization patterns in the cryptic sister species *Chironomus riparius* and *C. piger* across differentially polluted freshwater systems. *Ecotoxicology and Environmental Safety* 141, 280-289.

58. Barnosky AD, Hadly EA, Gonzalez P, Head J, Polly PD, Lawing AM, Eronen JT, Ackerly DD, Alex K, Biber E, Blois J, Brashares J, Ceballos G, Davis E, Dietl GP, Dirzo R, Doremus H, Fortelius M, Greene H, Hellmann J, Hickler T, Jackson ST, Kemp M, Koch PL, Kremen C, Lindsey EL, Looy C, Marshall CR, Mendenhall C, Mulch A, Mychajliw AM, **Nowak C**, Ramakrishnan U, Schnitzler J, Kashish DS, Solari K, Stegner L, Allison Stegner M, Stenseth NC, Wake MH, Zhang Z (2017) No Going Back: Merging paleontology with conservation biology to guide the future of terrestrial ecosystems. *Science* 355, eaah4787.

57. Pedrosa J, Machado AL, Cocchiararo B, Soares AMVM, **Nowak C**, Pestana JLT (2017) Assessing the suitability of genetic diversity of *Chironomus riparius* (Meigen) as an indicator of environmental pollution. *Ecological Indicators* 78, 115-124.

56. Pedrosa J, Campos D, Cocchiararo B, Soares AMVM, Barata C, **Nowak C**; Pestana JLT: Evolutionary consequences of historical metal contamination for natural populations of *Chironomus riparius* (Diptera: Chironomidae). *Ecotoxicology* 26, 534-546.

55. Lesniak I, Heckmann I, Heitlinger E, Szentiks CA, **Nowak C**, Harms V, Jarausch A, Reinhardt I, Kluth G, Hofer H, Krone O: Endoparasite richness and diversity increase with population size and change with individual age in a recolonising expanding large carnivore population. *Nature Scientific Reports* 7, 41730.

54. Pedrosa J, Gravato C, Campos D, Cardoso P, Figueira EMAP, **Nowak C**, Soares AMVM, Barata C, Pestana JLT: Investigating heritability of cadmium tolerance in *Chironomus riparius* natural populations: A physiological approach. *Chemosphere* 170, 83-94.
53. Reiners TE, Fuchs M, Hailer F, Janke A, **Nowak C** (2017) Establishing species-specific sexing markers suitable for non-invasive samples of species lacking genomic resources - an example using the highly endangered common hamster *Cricetus cricetus*. *Conservation Genetics Resources* 9, 253-255.
52. Beutel T, Reineking Björn, Tiesmeyer A, **Nowak C**, Heurich M: Spatial patterns of co-occurrence of the European wildcat (*Felis silvestris silvestris*) and domestic cats (*Felis silvestris catus*) in the Bavarian Forest National Park. *Wildlife Biology* wlb.00284. 2017.
51. Pedrosa J, Cocchiara B, Bordalo MD, Rodrigues AC, Soares AMVM; Barata C, **Nowak C**, Pestana JLT (2017) The role of genetic diversity and past-history selection pressures in the susceptibility of *Chironomus riparius* populations to environmental stress. *Science of the Total Environment* 576, 807-816.
50. Hindrikson M, Remm J, Pilot M, Godinho R, Stronen AV, Baltrūnaitė L, Czarnomska SD, Leonard JA, Randi E, **Nowak C**, Åkesson M, López-Bao JV, Álvares F, Llaneza L, Echegaray J, Vilà C, Ozolins J, Rungis D, Aspi J, Paule L, Skrbinšek T, Saarma U (2017) Wolf population genetics in Europe: a systematic review, meta-analysis and suggestions for conservation and management. *Biological Reviews* 92, 1601-1629.
49. Steyer K, Kraus RHS, Mölich T, Anders O, Cocchiara B, Frosch C, Geib A, Götz M, Herrmann M, Hupe K, Kohlen A, Krüger M, Müller F, Pir J B, Reiners TE, Roch S, Schade U, Schiefenhövel P, Siemund M, Simon O, Steeb S, Streif S, Streit B, Thein J, Tiesmeyer A, Trinzen M, Vogel B, **Nowak C** (2016) Large-scale genetic census of an elusive carnivore, the European wildcat (*Felis s. silvestris*). *Conservation Genetics* 17, 1183–1199.
48. Kutschera VE, Frosch C, Janke A, Skírnisson K, Bidon T, Lecomte N, Fain SR, Eiken HG, Hagen SB, Arnason U, Laidre KL, **Nowak C**, Hailer F (2016) High genetic variability of vagrant polar bears illustrates importance of population connectivity in fragmented sea ice habitats. *Animal Conservation* 4, 337–349.
47. de Groot GA, **Nowak C**, Skrbinšek T, Andersen L, Aspi J, Fumagalli L, Godinho R, Harms, V, Jansman HAH, Liberg O, Marucco F, Mysłajek RW, Nowak S, Pilot M, Randi E, Reinhardt I, Śmietana W, Szewczyk M, Taberlet P, Vilà C, Muñoz-Fuentes V (2016) Decades of population genetic research call for harmonization of molecular markers: the grey wolf, *Canis lupus*, as a case study. *Mammal Review* 46, 44-59.
46. Andersen LW, Harms V, Caniglia R, Czarnomska SD, Fabbri E, Jędrzejewska B, Kluth G, Madsen AB, **Nowak C**, Pertoldi C, Randi E, Reinhardt I, Stronen AV (2015) Long-distance dispersal of a wolf, *Canis lupus*, in Northwestern Europe. *Mammal Research* 60: 163-168.
45. Geismar J, Haase P, **Nowak C**, Sauer J, Pauls SU (2015) Local population genetic structure of the montane caddisfly *Drusus discolor* is driven by overland dispersal and spatial scaling, *Freshwater Biology*, 60: 209-221.
44. Harms V, **Nowak C**, Carl S, Munoz-Fuentes V (2015) Experimental evaluation of genetic predator identification from saliva traces on wildlife kills. *Journal of Mammalogy* 96: 138-143.
43. Kraus RHS, vonHoldt B, Cocchiara B, Harms V, Bayerl H, Kühn R, Förster DW, Fickel J, Roos C, **Nowak C** (2015) A single-nucleotide polymorphism-based approach for rapid and cost-effective genetic wolf monitoring in Europe based on non-invasively collected samples. *Molecular Ecology Resources* 15: 295-305.

42. **Nowak C**, Domokos C, Dutsov A and Frosch C (2014) Molecular evidence for historic long-distance translocations of brown bears in the Balkan region. *Conservation Genetics* 15: 743-747.
41. Frosch C, Dutsov A, Zlatanova D, Valchev K, Reiners TE, Steyer K, Pfenninger M, **Nowak C** (2014) Noninvasive genetic assessment of brown bear population structure in Bulgarian mountain regions. *Mammalian Biology* 79: 268-276.
40. Frosch C, Kraus RHS, Angst C, Allgöwer R, Michaux J, Teubner J, **Nowak C** (2014) The genetic legacy of multiple beaver reintroductions in Central Europe. *PLoS ONE* 9: e97619.
39. Senn H, Ogden R, Frosch C, Syrůčková A, Campbell-Palmer R, Munclinger P, Durka W, Kraus RKS, Saveljev A, **Nowak C**, Stubbe A, Stubbe M, Michaux J, Lavrov V, Samiya R, Ulevicius A, Rosell F (2014) Nuclear and mitochondrial genetic structure in the Eurasian beaver (*Castor fiber*) – implications for future reintroductions. *Evolutionary Applications* 7: 645-662.
38. Reiners TE, Eidenschenk J, Neumann K, **Nowak C** (2014) Preservation of genetic diversity in a wild and captive population of a rapidly declining mammal, the Common hamster of the French Alsace region. *Mammalian Biology* 79: 240-246.
37. **Nowak C**, Büntjen M, Steyer K, Frosch C (2014) Testing mitochondrial markers for noninvasive genetic species identification in European mammals. *Conservation Genetics Resources* 6, 41-44.
36. **Nowak C**, Zuther S, Geismar J (2014) Rapid development of microsatellite markers for the critically endangered Saiga (*Saiga tatarica*) using Illumina® Miseq Next Generation Sequencing technology. *Conservation Genetics Resources* 6: 159-162.
35. Gravendeel B, de Groot A, Kik M, Beentjes KK, Bergman H, Caniglia R, Cremers H, Fabbri E, Groenenberg D, Grone A, Bruinderink GG, Font L, Hakhof J, Harms V, Jansman H, Janssen R, Lammertsma D, Laros I, Linnartz L, van der Marel D, Mulder JL, van der Mije S, Nieman AM, **Nowak C**, Randi E, Rijks M, Speksnijder A, Vonhof HB (2013) The first wolf found in the Netherlands in 150 years was the victim of a wildlife crime. *Lutra* 56: 93-109.
34. Kutschera VE, Lecomte N, Janke A, Selva N, Sokolov AA, Haun T, Steyer K, **Nowak C**, Hailer F (2013) A range-wide synthesis and timeline for phylogeographic events in the red fox (*Vulpes vulpes*). *BMC Evolutionary Biology* 13, 114.
33. Nemeč S, Patel S, **Nowak C**, Pfenninger M (2013) Evolutionary determinants of population differences in population growth rate x habitat temperature interactions in *Chironomus riparius*. *Oecologia* 172, 585-594.
32. Ernst A, Sauer J, Wittig R, **Nowak C** (2013) Fine-scale genetic structure in the montane plant *Geranium sylvaticum* - implications for conservation strategies under climate change. *Population Ecology* 55, 417-431.
31. Hartmann S, Steyer K, Kraus R, Segelbacher G, **Nowak C** (2013) Potential barriers to gene flow in the endangered European wildcat. *Conservation Genetics* 14, 413-426.
30. Geismar J, **Nowak C** (2013) Isolation and characterisation of new microsatellite markers for the stonefly *Brachyptera braueri* comparing a traditional approach with high throughput 454 sequencing. *Conservation Genetics Resources* 5, 413-416.
29. Vogt C, Langer-Jaesrich M, Elsässer O, Schmitt C, Van Dongen S, **Nowak C** (2013) Effects of Inbreeding on mouthpart deformities of *Chironomus riparius* under sublethal pesticide exposure. *Environmental Toxicology and Chemistry* 32, 423-425.
28. Pauls SU, **Nowak C**, Bálint M, Pfenninger M (2013) The impact of global climate change on genetic diversity within populations and species. *Molecular Ecology* 22, 925-946.

27. Steyer K, Simon O, Kraus R, **Nowak C** (2013) Hair trapping with valerian-treated lure sticks as a tool for genetic wildcat monitoring in low-density habitats. *European Journal of Wildlife Research* 59, 39-46.
26. Kappes H, Katzschner L, **Nowak C** (2012) Urban summer heat load: meteorological data as a proxy for metropolitan biodiversity. *Meteorologische Zeitschrift* 21, 525-528.
25. **Nowak C**, Vogt C, Pfenninger M, Schwenk K, Streit B, Oehlmann J, Oetken M (2012) Impact of genetic diversity and inbreeding on the life-history of *Chironomus* midges over consecutive generations. *Chemosphere* 88, 988-993.
24. Nemeč S, Heß M, **Nowak C**, Pfenninger M (2012) Experimental evidence for niche segregation in a species pair of non-biting midges. *Hydrobiologia* 691, 203-212.
23. Bálint M, Málnás K, **Nowak C**, Geismar J, Vánca E, Polyák L, Lengyel S, Haase P (2012) Species history masks the effects of human-induced range loss - unexpected genetic diversity in the endangered giant mayfly *Palingenia longicauda*. *PLoS ONE* 7, e31872.
22. Müller R, Seeland A, Jagodzinski L, Diogo J, **Nowak C**, Oehlmann J (2012) Simulated climate change conditions unveil the toxic potential of the fungicide pyrimethanil on the midge *Chironomus riparius*: a multigenerational experiment. *Ecology and Evolution* 2, 196-210.
21. Sauer J, Domisch S, **Nowak C**, Haase P (2011) Low mountain ranges - summit traps for montane freshwater insects under climate change. *Biodiversity and Conservation* 20, 3133-3146.
20. Bálint M, Domisch S, Engelhardt S, Haase P, Lehrian S, Sauer J, Theissinger K, Pauls SU, **Nowak C** (2011) Cryptic biodiversity loss linked to global climate change. *Nature Climate Change* 1, 313-318 (Cover story, listed by the Faculty of 1000).
19. Geismar J, Sauer J, Haase P, **Nowak C** (2011) New microsatellite markers for the assessment of fine-scale dispersal patterns in the endangered montane caddisfly *Drusus discolor*. *Conservation Genetics Resources* 3, 605-607.
18. Frosch C, Dutsov A, Georgiev G, **Nowak C** (2011) Case report of a fatal bear attack documented by forensic wildlife genetics. *Forensic Science International: Genetics* 5, 342-344.
17. Frosch C, Haase P, **Nowak C** (2011). First set of microsatellite markers for genetic characterization of the Eurasian Beaver (*Castor fiber*) based on tissue and hair samples. *European Journal of Wildlife Research* 57, 679-682.
16. Vogt C, Hess M, **Nowak C**, Oehlmann J, Oetken M (2010). Effects of cadmium on life-cycle parameters in a multi-generation study with *Chironomus riparius* following a pre-exposure of populations to two different tributyltin concentrations for several generations. *Ecotoxicology* 19, 1174-1182.
15. **Nowak C**, Brown, CM, Hellmann, JJ (2009). Development of 16 microsatellite markers for the hybridizing species *Papilio glaucus* and *Papilio canadensis* and their applicability to museum specimen and congeneric species. *Molecular Ecology Resources* 9, 800-803.
14. Senapati S, Mahon AR, Gordon , **Nowak C**, Powell THQ, Feder J, Lodge DM, Chang HC (2009). Rapid on-chip genetic detection microfluidic platform for real world applications. *Biomicrofluidics* 3, 022407.
13. Zakharov EV, Lobo NF, **Nowak C**, Hellmann, JJ (2009). Introgression as a likely cause of mtDNA paraphyly in two allopatric skippers (Lepidoptera: Hesperidae). *Heredity* 102, 590-599.
12. **Nowak C**, Vogt C, Oetken M, Pfenninger M, Schwenk K, Oehlmann J, Streit B (2009). Genetic erosion in tributyltin exposed experimental *Chironomus* populations. *Environmental Pollution* 157, 881-886.

11. Pfenninger M, **Nowak C** (2008) What allows sympatric occurrence of cryptic sister species? Reproductive isolation and ecological repartition among *Chironomus riparius* and *C. piger* (Insecta, Diptera). *PLoS ONE* 6, e2541.
10. **Nowak C**, Czeikowitz A, Vogt C, Oetken K, Streit B, Schwenk K (2008) Variation in tolerance to cadmium exposure among genetically characterized laboratory populations of the midge *Chironomus riparius* (Diptera: Chironomidae). *Chemosphere* 71, 1950-2956.
09. Barateiro J, Natal-da-Luz T, Sousa JP, Vogt C, **Nowak C** (2007) Tolerance of genetically characterized *Folsomia candida* strains to phenmedipham exposure - a comparison between reproduction and avoidance tests. *Journal of Soils and Sediments* 6, 388-392.
08. **Nowak C**, Jost D, Vogt C, Oetken M, Schwenk K, Oehlmann J (2007) Effects of inbreeding and reduced genetic variation on tolerance to cadmium stress in the midge *Chironomus riparius*. *Aquatic Toxicology* 85, 278-284.
07. Pfenninger M, **Nowak C**, Kley C, Steinke D, Streit B (2007) Utility of DNA-taxonomy and barcoding for the inference of larval community structure in morphologically cryptic *Chironomus* (Diptera) species. *Molecular Ecology* 16, 1957-1968.
06. Vogt C, Pupp A, **Nowak C**, Jagodzinski LS, Baumann J, Jost D, Oetken M, Oehlmann J (2007) Interaction between genetic diversity and temperature stress on life-cycle parameters and genetic variability of *Chironomus riparius* populations. *Climate Research* 33, 207-214.
05. **Nowak C**, Vogt C, Barateiro J, Schwenk K (2007) Genetic impoverishment in laboratory cultures of the test organism *Chironomus riparius*. *Environmental Toxicology & Chemistry* 26, 118-122.
04. Vogt C, **Nowak C**, Barateiro J, Schwenk K, Oetken M, Oehlmann J (2007) Multi-generation studies with *Chironomus riparius* - Effects of low tributyltin concentrations on life history parameters and genetic diversity. *Chemosphere* 67, 2192-2200.
03. Pfenninger M, **Nowak C**, Magnin F (2007) Intraspecific range dynamics and niche evolution in *Candidula* land snail species. *Biological Journal of the Linnean Society* 90, 303-317.
02. Vogt C, Belz D, Galluba S, **Nowak C**, Oetken M, Oehlmann J (2007) Effects of cadmium and tributyltin on development and reproduction of the non-biting midge *Chironomus riparius* (Diptera) - baseline experiments for future multi-generation studies. *Journal of Environmental Science and Health, Part A* 42, 1-9.
01. **Nowak C**, Hankeln T, Schmidt ER, Schwenk K (2006) Development and localization of microsatellite markers for the sibling species *Chironomus riparius* and *Chironomus piger* (Diptera: Chironomidae). *Molecular Ecology Notes* 6, 915-917.

Non ISI-listed Articles & Book Chapters

- Steyer K, Tiesmeyer A, Mölich T, Vogel B, **Nowak C** (2016) Populationsstruktur und Hybridisierungsgrad im deutschen Wildkatzenbestand – Ergebnisse einer 7-jährigen Bestandsaufnahme. In: Volmer K & Simon O: Schriften des Arbeitskreis Wildbiologie an der Justus-Liebig-Universität Gießen e.V. 26; VVB Lauferweiler Verlag, Gießen.
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