

## Dr. Carsten Nowak Curriculum Vitae - 03/2024

Fachgebiet Naturschutzgenetik & Zentrum für Wildtiergenetik  
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### Wissenschaftlicher Werdegang

seit 2020	Leiter Zentrum für Wildtiergenetik, Senckenberg Forschungsinstitut und Naturmuseum Frankfurt, Außenstelle Gelnhausen
2018-2021	Sprecher Projektbereich <i>Genomisches Biomonitoring</i> , LOEWE Zentrum für Translationale Biodiversitätsgenomik (TBG), Frankfurt am Main
2008 - 2014	Projektgruppenleiter <i>Anpassung und Klima</i> , Senckenberg Biodiversität und Forschungszentrum (BiK-F), Frankfurt am Main
seit 2008	Leiter Fachgebiet Naturschutzgenetik, Senckenberg Forschungsinstitut und Naturmuseum Frankfurt, Außenstelle Gelnhausen
2007 - 2008	Wiss. Mitarbeiter am Department of Biological Sciences, University of Notre Dame, USA
2003 - 2007	Promotion in Biologie (Populationsgenetik), Goethe-Universität Frankfurt am Main, abgeschlossen mit <i>summa cum laude</i>
2003	Diplom in Biologie (1,0) an der Goethe-Universität Frankfurt am Main

### Wissenschaftlicher und gesellschaftlicher Service

- Gründung *CEwolf* (2015) und *CElynx*-Konsortien (2021) mit dem Ziel eines international harmonisierten genetischen Monitorings von Wolf und Luchs in Mitteleuropa
- Mitglied der internationalen IUCN-Expertengruppe für Großraubtiere in Europa (LCIE) (2020)
- Mitglied der *Dokumentations- und Beratungsstelle des Bundes zum Thema Wolf* (DBBW) (2015)
- Koordination Nationales Referenzzentrum für genetische Analysen bei Luchs und Wolf (seit 2010)
- Regelmäßige Tätigkeit als Gutachter für >30 wissenschaftliche Fachzeitschriften
- >200 (Populär-)Wissenschaftliche Vorträge
- Organisation mehrerer internationaler Fachkonferenzen, z.B. Jahrestagung der Deutschen Gesellschaft für Säugetierkunde (Frankfurt, 2012) & 4th Annual Meeting in Conservation Genetics (Frankfurt, 2020)

## Eingeworbene Drittmittelprojekte (€ 9,8 M, Stand: Januar 2024)

27. Wolfness - Preserving the natural heritage of wolves: a multidisciplinary approach towards effective and socially acceptable management of wolf-dog hybridization across Europe. Biodiversa+ (2023), mit P Ciucci et al.
26. Bundesmonitoring Wildkatze. Bundesamt für Naturschutz (2021-2023)
25. Genomweites Populationsmonitoring mitteleuropäischer Säugetiere. Zentrum für Translationale Biodiversitätsgenomik (TBG), Landes-Offensive zur Entwicklung Wissenschaftlich-ökonomischer Exzellenz (LOEWE) (2022-2024)
24. Bund-Länder-Verwaltungsvereinbarung Großkarnivorengenetik (2021-2026). BMU, Bundesländer
23. Gartenschläfer in Deutschland (Projektteil Genetik). Bundesprogramm Biologische Vielfalt (2018-2024)
22. *eDNA Chip*: Entwicklung genomischer Assays zur quantitativen Artdiagnostik anhand von Umweltproben. Zentrum für Translationale Biodiversitätsgenomik, Landes-Offensive zur Entwicklung Wissenschaftlich-ökonomischer Exzellenz (LOEWE) (2018-2021)
21. Entwicklung eines Konzepts zur Übertragung von Daten aus dem genetischen Monitoring der Wildkatze für den FFH-Bericht 2019, Bundesamt für Naturschutz (2016)
20. Estimating genetic and demographic parameters of the Romanian wolf population, LIFE-Projekt WOLFLIFE (LIFE13NAT/RO/000205) (2015-2017)
19. Dokumentations- und Beratungsstelle des Bundes für das Thema Wolf (DBBW) – Themenfeld Gendatenbank. F&E-Projekt des BMU (seit 2016)
18. eDNA-basierter Nachweis von Maifischen, HIT-Umwelt- und Naturschutzstiftung, mit S Stoll (2015)
17. Entwicklung, Etablierung und Anwendung einer kostengünstigen, flächendeckend einsetzbaren Methode zur Detektion der Krebspest mittels environmental DNA, mit S Stoll & M Thines (2014)
16. Erfassung und Reproduktionserfolg beim Feldhamster in Hessen. Deutsche Wildtierstiftung (2014), mit TE Reiners
15. Genetische Untersuchungen zur Herkunftsanalyse der hessischen Fischottervorkommen. Regierungspräsidium Darmstadt (2014)
14. Development and implementation of genetic methods for determination of the status of the wild animals: Brown bear, wolf, lynx, and wildcat. Bulgarian Ministry of the Environment (2013)
13. Experimentelle Populationsgenomik der lokalen Adaptation von *Chironomus riparius*, Deutsche Forschungsgemeinschaft (DFG), mit M Pfenninger & T Hankeln (2013)
12. *Wildkatzensprung* – Genetisches Begleitmonitoring im Rahmen des BUND-Projekts zum Schutz der Wildkatze in Deutschland. Bundesprogramm Biologische Vielfalt (2012)
11. Development and application of microsatellite markers for the Saiga antelope. Royal Society for the Protection of Birds (2012)
10. Inferring genetic patterns of ongoing recolonization of Central Europe by elusive, large carnivores using novel SNP marker systems for noninvasive samples. Leibniz Wettbewerbsverfahren SAW (2011)
9. Entwicklung einer Haarfallenmethode für das genetische Bibermonitoring in Hessen. Regierungspräsidium Darmstadt (2011)
8. Importance of genetic diversity for populations under climate change. Biodiversität und Klima Forschungszentrum (BiK-F). Landes-Offensive zur Entwicklung Wissenschaftlich-ökonomischer Exzellenz (LOEWE) (2011)
7. Entwicklung eines Detektionssystem zur genetischen Identifizierung des Verursachers von Nutztierrißen. HMUELV (2010)
6. Estimating losses in genetic diversity under climate change. Biodiversität und Klima Forschungszentrum (BiK-F). Landes-Offensive zur Entwicklung Wissenschaftlich-ökonomischer Exzellenz (LOEWE) (2009)
5. Entwicklung eines nichtinvasiven Markersystems für das genetische Bibermonitoring in Hessen. Regierungspräsidium Darmstadt (2009)
4. DNA-basierte Populationsgrößenabschätzung der Wildkatze im Taunus. FENA (2009)
3. Inferring dispersal patterns in aquatic insects from Bayesian gene flow analysis and model selection. Deutsche Forschungsgemeinschaft (DFG) mit P Haase (2009)
2. Assessing the genetic population structure of montane insects – a global change genetic approach (BiK-F project code C5.2). Landes-Offensive zur Entwicklung Wissenschaftlich-ökonomischer Exzellenz (LOEWE) (2009)
1. Wildtier-Genotypisierungs-Service (2008 - fortlaufend)

## Fachpublikationen (nur peer-reviewed) Google Scholar H: 37, 4859 Zitate (Stand 12.03.24)

111. Wehrenberg G, Tokarska M, Cocchiararo B, **Nowak C** (2024) A reduced SNP panel optimised for non-invasive genetic assessment of a genetically impoverished conservation icon, the European bison. *Scientific Reports* 14, 1875
110. Jarausch A, von Thaden A, Sin T, Corradini A, Pop MI, Chiriac S, Gazzola A, **Nowak C** (2023) Assessment of genetic diversity, population structure and wolf-dog hybridization in the Eastern Romanian Carpathian wolf population. *Scientific Reports* 13, 22574
109. Jamieson A, Carmagnini A, Howard-McCombe J, Doherty S, Hirons A, Dimopoulos E, Lin AT, Allen R, Anderson-Whymark H, Barnett R, Batey C, Beglane F, Bowden W, Bratten J, De Cupere B, Drew E, Foley NM, Fowler T, Fox A, Geigl EM, Gottfredsen AB, Grange T, Griffiths D, Groß D, Haruda A, Hjerminde J, Knapp Z, Lebrasseur O, Librado P, Lyons LA, Mainland I, McDonnell C, Muñoz-Fuentes V, **Nowak C**, O'connor T, Peters J, Russo IRM, Ryan H, Sheridan A, Sinding MHS, Skoglund P, Swali P, Symmons R, Thomas G, Zetner T, Jensen T, Kitchener AC, Senn H, Lawson D, Driscoll C, Murphy WJ, Beaumont M, Ottoni C, Sykes N, Larson G, Frantz L (2023) Limited historical admixture between European wildcats and domestic cats. *Current Biology* 33, 4751-4760
108. Howard-McCombe J, Jamieson A, Carmagnini A, Russo IRM, Ghazali M, Campbell R, Driscoll C, Murphy WJ, **Nowak C**, O'Connor T, Tomsett L, Lyons LA, Muñoz-Fuentes V, Bruford MW, Kitchener AC, Larson G, Frantz L, Senn H, Lawson DJ, Beaumont MA (2023) Genetic swamping of the critically endangered Scottish wildcat was recent and accelerated by disease. *Current Biology* 33, 4761-4769
107. Nussberger B, Barbosa S, Beaumont M, Currat M, Devillard S, Heurich M, Howard-McCombe J, Mattucci F, **Nowak C**, Quilodrán CS, Senn H, Alves PC (2023) A common statement on anthropogenic hybridization of the European wildcat (*Felis silvestris*). *Frontiers in Ecology and Evolution* 11, 1156387
106. Gajdárová B, Belotti E, Bufka L, Volfová J, Wöfl S, Mináriková T, Hollerbach L, Dul'a M, Kleven O, Kutal M, **Nowak C**, Ozoliņš J, Tám B, Bryja J, Koubek P, Krojerová-Prokešová J (2023). Long-term genetic monitoring of a reintroduced Eurasian lynx population does not indicate an ongoing loss of genetic diversity. *Global Ecology and Conservation* 42, e02399
105. Riaz M, Warren D, Wittwer C, Cocchiararo B, Hundertmark I, Reiners TE, Klimpel S, Pfenninger M, Khaliq I, **Nowak C** (2023). Using eDNA to understand predator-prey interactions influenced by invasive species. *Oecologia* 202, 757-767
104. Ciucani MM, Ramos-Madriral J, Hernández-Alonso G, Carmagnini A, Aninta SG, Sun X, Scharff-Olsen CH, Lanigan LT, Fracasso I, Clausen CG, Aspi J, Kojola I, Baltrūnaitė L, Balčiauskas L, Moore J, Åkesson M, Saarma U, Hindrikson M, Hulva P, Bolfíková BC, **Nowak C**, Godinho R, Smith S, Paule L, Nowak S, Myslajek RW, Lo Brutto S, Ciucci P, Boitani L, Vernesi C, Stenøien HK, Smith O, Frantz L, Rossi L, Angelici FM, Cilli E, Sinding MHS, Gilbert MTP, Gopalakrishnan S (2023). The extinct Sicilian wolf shows a complex history of isolation and admixture with ancient dogs. *iScience* 26, 107307
103. Krojerová-Prokešová J, Gajdárová B, Reiners TE, Bolechová P, Kleven O, Koubek P, **Nowak C**, Ozoliņš J, Tám B, Voloshina I, Vallo P (2023). *Ex situ* versus *in situ* Eurasian lynx populations: implications for successful breeding and genetic rescue. *Conservation Genetics* 24, 203-217
102. Nieto-Blázquez ME, Schreiber D, Mueller SA, Koch K, **Nowak C**, Pfenninger M. Human impact on the recent population history of the elusive European wildcat inferred from whole genome data. *BMC Genomics* 23, 709
101. Mayer M, Olsen K, Schulz B, Matzen J, **Nowak C**, Thomsen PF, Hansen MM, Vedel-Smith C, Sunde P (2022) Occurrence and livestock depredation patterns by wolves in highly cultivated landscapes. *Frontiers in Ecology and Evolution* 10, 783027
100. Matias G, Rosalino LM, Alves PC, Tiesmeyer A, **Nowak C**, Ramos L, Steyer K, Astaras C, Brix M, Domokos C, Janssen R, Kitchener AC, Mestdagh X, L'Hoste L, Titeux N, Migli D, Youlatos D, Pfenninger M, Devillard S, Ruetten S, Anile S, Ferreras P, Diaz-Ruiz F, Monterroso P (2022) Genetic integrity of European wildcats: Variation across biomes mandates geographically tailored conservation strategies. *Biological Conservation* 268, 109518
99. Stronen AV, Mattucci F, Fabbri E, Galaverni M, Cocchiararo B, **Nowak C**, Godinho R, Ruiz-González A, Kusak J, Skrbinšek T, Randi E, Vlasseva A, Mucci N, Caniglia R (2022) A reduced SNP panel to trace gene flow across southern European wolf populations and detect hybridization with other *Canis* taxa. *Scientific Reports* 12, 4195
98. Stronen AV, Aspi J, Caniglia R, Fabbri E, Galaverni M, Godinho R, Kvist L, Mattucci F, **Nowak C**, von Thaden A, Harmoinen J (2022) Wolf-dog admixture highlights the need for methodological standards and multidisciplinary cooperation for effective governance of wild x domestic hybrids. *Biological Conservation* 266, 109467
97. Leyhausen J, Cocchiararo B, **Nowak C**, Ansorge H, Bertolino S, Büchner S, Fietz J, Foppen R, Juškaitis R, La Haye M, Lang J, Michaux J, Verbeylen G, von Thaden A, Mueller SA (2022) Genotyping-by-sequencing based SNP discovery in a non-model rodent, the endangered hazel dormouse. *Conservation Genetics Resources* 14, 195-201
96. Mueller SA, Prost S, Anders O, Breitenmoser-Würsten C, Kleven O, Klinga P, Konec M, Kopatz A, Krojerová-Prokešová J, Middelhoff L, Obexer-Ruff G, Reiners TE, Schmidt K, Sindičič M, Skrbinšek T, Tám B, Saveljev AP, Galsandorj N, **Nowak C** (2022) Genome-wide diversity loss in reintroduced Eurasian lynx populations urges immediate conservation management. *Biological Conservation* 266, 109442

95. von Thaden A, Cocchiararo B, Mueller SA, Reiners TE, Reinert K, Tuchscherer I, Janke A, **Nowak C** (2021) Informing conservation strategies with museum genomics: Long-term effects of past anthropogenic persecution on the elusive European wildcat. *Ecology and Evolution* 11, 17932-17951
94. Sunde P, Collet S, **Nowak C**, Thomsen PF, Møller Jensen M, Schulz B, Matzen J, Frank-Uwe Michler F-U, Vedel-Smith C, Olsen K (2021) Where have all the young wolves gone? Traffic and cryptic mortality create a regional wolf population sink in West-Central Europe. *Conservation Letters* 14, e12812
93. Harmoinen J, von Thaden A, Aspi J, Kvist L, Cocchiararo B, Jarausch A, Gazzola A, Sin T, Lohi H, Hytönen MK, Kojola I, Stronen AV, Caniglia R, Mattucci F, Galaverni M, Godinho R, Ruiz-González A, Randi E, Muñoz-Fuentes V, **Nowak C** (2021) Reliable wolf-dog hybrid detection in Europe using a reduced SNP panel developed for non-invasively collected samples. *BMC Genomics* 22, 473
92. Westekemper K, Tiesmeyer A, Steyer K, **Nowak C**, Signer C, Balkenhol N (2021) Do all roads lead to resistance? State road density is the main impediment to gene flow in a flagship species inhabiting a severely fragmented anthropogenic landscape. *Ecology & Evolution* 11, 8528-8541
91. Gajdárová B, Belotti E, Bufka L, Duľa M, Kleven O, Kotal M, Ozoliņš J, **Nowak C**, Reiners TE, Tām B, Volfová J, Krojerová-Prokešová J (2021) Long-distance lynx dispersal - a prospect for connecting native and reintroduced lynx populations in Central Europe. *Conservation Genetics*, 22: 799-809
90. Jarausch A, Harms V, Kluth G, Reinhardt I, **Nowak C** (2021) How the west was won: genetic reconstruction of rapid wolf recolonization into Germany's anthropogenic landscapes. *Heredity* 127, 92-106
89. Szewczyk M, **Nowak C**, Hulva P, Mergeay J, Stronen, AV, Černá Bolfiková B, Czarnomska SD, Diserens TA, Fenchuk V, Figura M, de Groot A, Haidt A, Hansen MM, Jansman H, Kluth G, Kwiatkowska I, Lubińska K, Michaux JR, Niedźwiecka N, Nowak S, Olsen K, Reinhardt I, Romański M, Schley L, Smith S, Špinkytė-Bačkaitienė R, Stachyra P, Stępnik KM, Sunde P, Thomsen PF, Zwijacz-Kozica T, Mysłajek RW (2021) Genetic support for the current discrete conservation unit of the Central European wolf population. *Wildlife Biology*, wlb.00809
88. Mueller SA, Reiners TE, Steyer K, von Thaden A, Tiesmeyer A, **Nowak C** (2020). Revealing the origin of wildcat reappearance after presumed long-term absence. *European Journal of Wildlife Research* 66, 1-8
87. Mueller SA, Reiners TE, Middelhoff L, Anders O, **Nowak C** (2020) The rise of a large carnivore population in Central Europe: Genetic evaluation of lynx reintroduction in the Harz Mountains. *Conservation Genetics* 21, 577-587
86. von Thaden A, **Nowak C**, Tiesmeyer A, Reiners TE, Alves PC, Lyons LA, Mattucci F, Randi E, Cragolini M, Galián J, Hegyeli Z, Kitchener A, Lambinet C, Lucas JM, Mölich T, Ramos L, Schockert V, Cocchiararo B (2020) Applying genomic data in wildlife monitoring: Development guidelines for genotyping degraded samples with reduced single nucleotide polymorphism panels. *Molecular Ecology Resources* 20, 662-680
85. Tiesmeyer A, Ramos L, Lucas JM, Steyer K, Alves PC, Astaras C, Brix M, Cragolini M, Domokos C, Jansen R, Kitchener A, Mestdagh X, Migli D, Mulder JL, Schockert V, Youlato D, Pfenninger M, **Nowak C** (2020) Range-wide patterns of human-mediated hybridisation in European wildcats. *Conservation Genetics* 21, 247-260
84. Eddine A, Gomes Rocha R, Mostefai N, Karssene Y, De Smet K, Brito JC, Klees D, **Nowak C**, Cocchiararo B, Lopes S, Van Der Leer P, Godinho R (2020) Demographic expansion of an African opportunistic carnivore during the Neolithic revolution. *Biology Letters* 16, 20190560
83. Brugger M, Jähriig M, Peper P, Cocchiararo B, **Nowak C**, Ansoerge H (2020) Influence of Eurasian beaver (*Castor fiber*) on Eurasian otter (*Lutra lutra*) evaluated by activity/density estimates in anthropogenic habitats in eastern Germany. *IUCN/SSC Otter Specialist Group Bulletin* 37, 98-119
82. Riaz M, Kümmerlen M, Wittwer C, Cocchiararo B, Khaliq I, Pfenninger M, **Nowak C** (2020) Combining environmental DNA and species distribution modeling to evaluate reintroduction success of a freshwater fish. *Ecological Applications* 30, e02034
81. Riaz M, Wittwer C, **Nowak C**, Cocchiararo B (2020) An environmental DNA assay for the detection of the regionally endangered freshwater fish *Alburnoides bipunctatus* in Germany. *Conservation Genetics Resources* 12, 41-43
80. Holderegger R, Balkenhol, Bolliger J, Engler JO, Gugerli F, Hochkirch A, **Nowak C**, Segelbacher G, Widmer A, Zachos FE (2019) Conservation genetics: linking science with practice. *Molecular Ecology* 28, 3848-3856
79. Arbieu H, Mehring M, Bunnefeld N, Kaczynsky P, Reinhardt I, Ansoerge H, Boehning-Gaese K, Glikman J, Kluth G, **Nowak C**, Müller T (2019) Attitudes towards returning wolves (*Canis lupus*) in Germany: Exposure, information sources and trust matter. *Biological Conservation* 234, 202-210
78. Karssene Y, Godinho R, Chammem M, Cocchiararo B, Nouria S, **Nowak C** (2019) Noninvasive DNA sampling and camera trapping suggest dramatic regional conservation status of an understudied carnivore: the Rüppell's fox in Tunisia. *Journal of Natural History* 53, 1439-1449
77. Reinhardt I, Kluth G, **Nowak C**, Szentiks C, Krone O, Ansoerge H, Müller T Germany (2019) Military training areas facilitate the recolonization of wolves in Germany. *Conservation Letters*, e12635
76. Ali T, Muñoz-Fuentes V, Schmuker A, Buch A-K, Dutbayev A, Glynou K, Khaliq I, Kachour L, Kitner M, Nigrelli L, Ploch S, Runge F, Solovyeva I, Xia X, Çelik A, Gabrielyan I, Vakhrusheva L, Maciá-Vicente JG, **Nowak C**, Thines M (2019) Out of Transcaucasia: Origin of western and central Palearctic populations of *Microthlaspi perfoliatum*. *Flora* 253, 127-141

75. Wittwer C, Stoll S, Strand D, Vrålstad T, Thines M, **Nowak C** (2019) eDNA-based crayfish plague detection as practical tool for biomonitoring and risk assessment of *A. astaci*-positive crayfish populations. *Biological Invasions* 21, 1075-1088
74. Karssene Y, **Nowak C**, Chammem M, Cocchiaro B, Said N (2019) Genetic diversity of the genus *Vulpes* (Red fox and Fennec fox) in Tunisia based on mitochondrial DNA and noninvasive DNA sampling. *Mammalian Biology* 96, 118-123
73. Foucault Q, Wieser A, Heumann-Kiesler C, Diogo J, Cocchiaro B, **Nowak C**, Waldvogel A, Pfenninger M (2018) An experimental assessment of reproductive isolation and its consequences for seasonal hybridization dynamics. *Biological Journal of the Linnean Society* 126, 327-337
72. Bálint M, **Nowak C**, Márton O, Pauls SU, Wittwer C, Aramayo JL, Schulze A, Chambert T, Cocchiaro B, Jansen M (2018) Accuracy, limitations and cost-efficiency of eDNA-based community survey in tropical frogs. *Molecular Ecology Resources* 18, 1415-1426
71. Förster D, Bull J, Lenz D, Autenrieth M, Pajjmans J, Kraus R, **Nowak C**, Bayerl H, Kuehn R, Saveljev A, Sindičić M, Hofreiter M, Schmidt K, Fickel J (2018) Targeted re-sequencing of coding DNA sequences for SNP discovery in non-model species. *Molecular Ecology Resources* 18, 1356-1373
70. Karssene Y, Chammem M, **Nowak C**, Habib Yahyaoui M, de Smet K, Castro D, Lopes S, Muñoz-Fuentes V, Cocchiaro B, Kless D, Van Der Leer P, Khorchani T, Noura S, Godinho R (2018) Noninvasive genetic assessment provides evidence of extensive gene flow and high movement ability in the African golden wolf. *Mammalian Biology* 92, 94-101
69. Wittwer C, **Nowak C**, Strand D, Vralstad T, Thines M, Stoll S (2018) Comparison of two water sampling approaches for crayfish plague detection. *Limnologica* 70, 1-9
68. Hollerbach L, Heurich M, Reiners TE, **Nowak C** (2018) Detection dogs allow for systematic non-invasive collection of DNA samples from Eurasian lynx (*Lynx lynx*). *Mammalian Biology* 90, 42-46
67. Steyer K, Tiesmeyer A, Muñoz-Fuentes V, **Nowak C** (2018) Low rates of hybridization between European wildcats and domestic cats in a human dominated landscape. *Ecology & Evolution* 8, 2290-2304
66. Bayerl H, Kraus RHS, **Nowak C**, Foerster DW, Fickel J, Kuehn R (2018) 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* 18, 107-117
65. Karamanlidis AA\*, Skrbinek T\*, Krampokoukis L, de Gabriel Hernando M, Muñoz-Fuentes V, Bailey Z, **Nowak C**, Stronen A (2018) History-driven population structure and asymmetric gene flow in a recovering large carnivore at the rear-edge of its European range. *Heredity* 120, 168
64. Wittwer C, Stoll S, Strand D, Vralstad T, **Nowak C**, Thines M (2018) eDNA-based crayfish plague monitoring is superior to conventional trap-based assessments in year-round detection probability. *Hydrobiologia* 807, 87-97
63. 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
62. Zwijacz-Kozica T, Ważna A, Muñoz-Fuentes V, Tiesmeyer A, Cichocki J, **Nowak C** (2017) Not European wildcats, but domestic cats inhabit Tatra National Park. *Polish Journal of Ecology* 65, 115-121
61. Von Thaden, Cocchiaro B, Jarausch A, Jüngling H, Karamanlidis AA, Tiesmeyer A, **Nowak C**, Muñoz-Fuentes V (2017) Assessing SNP genotyping of noninvasively collected wildlife samples using microfluidic arrays. *Scientific Reports* 7, 10768
60. Eddine A, Mostefai N, De Smet K, Klees D, Ansoorge H, Karssene Y, **Nowak C**, Van Der Leer P (2017) 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, Cocchiaro 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. Tahir A, Muñoz-Fuentes V, Schmuker A, Buch, AK, Celik A, Dutbayev A, Gabrielyan I, Glynou K, Kitner M, Kaliq I, Nigrelli L, Macia-Vicente J, Ploch S, Runge F, Solovyeva I, Vakhrusheva L, Xia X **Nowak C**, Thines M (2017) Genetic patterns reflecting Pleistocene range dynamics in the annual calcicole plant *Microthlaspi erraticum* across its Eurasian range. *Flora* 236, 132-142
57. Pedrosa J, Machado AL, Cocchiaro 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, Cocchiaro B, Soares AMVM, Barata C, **Nowak C**, Pestana JLT (2017) 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 (2017) Endoparasite richness and diversity increase with population size and change with individual age in a recolonising expanding large carnivore population. *Scientific Reports* 7, 41730

54. Pedrosa J, Gravato C, Campos D, Cardoso P, Figueira EMAP, **Nowak C**, Soares AMVM, Barata C, Pestana JLT (2017) 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
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