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Research focus: Birds and their microbiota
Teaching: animal ecology and ecophysiology

Research output

Host traits rather than migration and molting strategies explain feather bacterial load in Palearctic passerines

Javůrková, V. G., Brlík, V., Heneberg, P., Požgajová, M., Procházka, P., Dietz, M. W., Salles, J. F. & Tieleman, B. I., 15-Nov-2024, In: *Iscience*. 27, 11, 15 p., 111079.

Gut microbiota of homing pigeons shows summer–winter variation under constant diet indicating a substantial effect of temperature

Dietz, M., Matson, K. D., Versteegh, M., van der Velde, M., Parmentier, H. K., Arts, J. A. J., Falcao Salles, J. & Tieleman, B. I., 13-Dec-2022, In: *Animal microbiome*. 4, 21 p., 64.

Gut microbiota of homing pigeons shows summer-winter variation under constant diet indicating a substantial effect of temperature

Dietz, M., Matson, K., Versteegh, M., van der Velde, M., Parmentier, H. K., Arts, J. A. J., Falcao Salles, J. & Tieleman, B. I., 18-May-2022, (Submitted) *BioRxiv*, (bioRxiv).

DNA metabarcoding quantifies the relative biomass of arthropod taxa in songbird diets: Validation with camera-recorded diets

Verkuil, Y. I., Nicolaus, M., Ubels, R., Dietz, M. W., Samplonius, J. M., Galema, A., Kiekebos, K., de Knijff, P. & Both, C., May-2022, In: *Ecology and Evolution*. 12, 5, 17 p., e8881.

Een groene zeldzaamheid: Opgezette kāpāpō

Dietz, M., 2022, *Panorama van de wetenschap*. Smit, F., Dijkstra, A., Huisman, J. W. & Vreeling, S. (eds.). Groningen: Uitgeverij kleine Uil, p. 78-79 2 p.

A fruit diet rather than invertebrate diet maintains a robust innate immunity in an omnivorous tropical songbird

Nwaogu, C. J., Galema, A., Cresswell, W., Dietz, M. W. & Tieleman, B. I., Mar-2020, In: *Journal of Animal Ecology*. 89, 3, p. 867-883 17 p.

Prenatal transfer of gut bacteria in Rock pigeon

Dietz, M. W., Salles, J. F., Hsu, B.-Y., Dijkstra, C., Groothuis, T. G. G., van der Velde, M., Verkuil, Y. I. & Tieleman, B. I., Jan-2020, In: *Microorganisms*. 8, 1, 13 p., 61.

Do environmental factors influence the development of the gut microbiome in young birds?

Dietz, M., Falcao Salles, J., Both, C., Groothuis, T. & Tieleman, I., Aug-2017, (Unpublished).

Breeding limits foraging time: Evidence of interrupted foraging response from body mass variation in a tropical environment

Nwaogu, C. J., Dietz, M. W., Tieleman, B. I. & Cresswell, W., Apr-2017, In: *Journal of Avian Biology*. 48, 4, p. 563-569 7 p.

Ecological forensics: Using single point stable isotope values to infer seasonal schedules of animals after two diet switches

Jouta, J., Dietz, M. W., Reneerkens, J., Piersma, T., Rakhimberdiev, E., Hallgrímsson, G. T. & Pen, I., Apr-2017, In: *Methods in ecology and evolution*. 8, 4, p. 492-500 9 p.

Response to habitat modification by foraging dark-chanting goshawks *Melierax metabates* in a West African savanna

Buij, R., van Dorst, N., Salomons, H. F., Croes, B. M., Dietz, M. W. & Komdeur, J., Sept-2015, In: *Bird Conservation International*. 25, 3, p. 335-352 18 p.

Body mass and latitude both correlate with primary moult duration in shorebirds

Dietz, M., Rogers, K., S. Gutierrez, J. & Piersma, T., Jan-2015, In: Ibis. 157, p. 147-153 7 p.

Unusual patterns in ¹⁵N blood values after a diet switch in red knot shorebirds

Dietz, M. W., Piersma, T., Dekinga, A., Korthals, H. & Klaassen, M., 1-Jun-2013, In: Isotopes in Environmental and Health Studies. 49, 2, p. 283-292 10 p.

When the seasons don't fit: Speedy molt as a routine carry-over cost of reproduction

Dietz, M. W., Rogers, K. G. & Piersma, T., 17-Jan-2013, In: PLoS ONE. 8, 1, 7 p., e53890.

Review: Versteegh M.A. 2012. Physiology in a life history perspective: Stonechats' adaptations to different environments

Dietz, M., 30-Oct-2012, In: Ardea. 100, 2, p. 217-218 2 p.

Functional ecology of saltglands in shorebirds: Flexible responses to variable environmental conditions

Gutierrez, J. S., Dietz, M. W., Masero, J. A., Gill, R. E., Dekinga, A., Battley, P. F., Sanchez-Guzman, J. M. & Piersma, T., Feb-2012, In: Functional Ecology. 26, 1, p. 236-244 9 p.

Single-point isotope measurements in blood cells and plasma to estimate the time since diet switches

Klaassen, M., Piersma, T., Korthals, H., Dekinga, A. & Dietz, M. W., Aug-2010, In: Functional Ecology. 24, 4, p. 796-804 9 p.

Do Red Knots (*Calidris canutus islandica*) routinely skip Iceland during southward migration?

Dietz, M. W., Spaans, B., Dekinga, A., Klaassen, M., Korthals, H., van Leeuwen, C. & Piersma, T., Feb-2010, In: Condor. 112, 1, p. 48-55 8 p.

The use of plasma metabolites to predict weekly body-mass change in Red Knots

Dietz, M. W., Jenni-Eiermann, S. & Piersma, T., Feb-2009, In: Condor. 111, 1, p. 88-99 12 p.

Red knots give up flight capacity and defend food processing capacity during winter starvation

Dietz, M. W. & Piersma, T., Oct-2007, In: Functional Ecology. 21, 5, p. 899-904 6 p.

Twofold seasonal variation in the supposedly constant, species-specific, ratio of upstroke to downstroke flight muscles in red knots *Calidris canutus*

Piersma, T. & Dietz, M. W., Sept-2007, In: Journal of Avian Biology. 38, 5, p. 536-540 5 p.

Intraspecific variation in avian pectoral muscle mass: Constraints on maintaining maneuverability with increasing body mass

Dietz, M. W., Piersma, T., Hedenstrom, A., Brugge, M. & Hedenström, A., Apr-2007, In: Functional Ecology. 21, 2, p. 317-326 10 p.

Limits to growth: Some chicks are more equal than others

Klaassen, M. & Dietz, M., 2005, *Seeking Nature's Limits: Ecologists in the field*. Utrecht: KNNV, p. 135-140 6 p.

Cost-benefit analysis of mollusc-eating in a shorebird II: Optimizing gizzard size in the face of seasonal demands

van Gils, J. A., Piersma, T., Dekinga, A. & Dietz, M. W., Oct-2003, In: Journal of Experimental Biology. 206, 19, p. 3369-3380 12 p.

Basal metabolic rate declines during long-distance migratory flight in great knots

Battley, P. F., Dekinga, A., Dietz, M. W., Piersma, T., Tang, S. & Hulsman, K., Nov-2001, In: Condor. 103, 4, p. 838-845 8 p.

Time course and reversibility of changes in the gizzards of red knots alternately eating hard and soft food

Dekinga, A., Dietz, M. W., Koolhaas, A. & Piersma, T., Jun-2001, In: *Journal of Experimental Biology*. 204, 12, p. 2167-2173 7 p.

Is long-distance bird flight equivalent to a high-energy fast? Body composition changes in freely migrating and captive fasting great knots

Battley, P. F., Dietz, M. W., Piersma, T., Dekinga, A., Tang, S. & Hulsman, K., 2001, In: *Physiological and Biochemical Zoology*. 74, 3, p. 435-449 15 p.

The assessment of body composition and other parameters by ultrasound scanning

Starck, J. M., Dietz, M. & Piersma, T., 2001, *Body composition analysis of animals: A handbook of non-destructive methods*. Speakman, J. R. (ed.). Cambridge: Cambridge University Press, p. 188-210 23 p.

Correction for Battley et al., Empirical evidence for differential organ reductions during trans-oceanic bird flight

Battley, P. F., Piersma, T., Dietz, M. W., Tang, S. X., Dekinga, A. & Hulsman, K., 22-Dec-2000, In: *Proceedings of the Royal Society B*. 267, 1461, p. 2567-2567 1 p.

Avian pectoral muscle size rapidly tracks body mass changes during flight, fasting and fuelling

Lindström, Å., Kvist, A., Piersma, T., Dekinga, A. & Dietz, M. W., Mar-2000, In: *Journal of Experimental Biology*. 203, 5, p. 913-919 7 p.

Empirical evidence for differential organ reductions during trans-oceanic bird flight

Battley, P. F., Piersma, T., Dietz, M. W., Tang, S. X., Dekinga, A. & Hulsman, K., 22-Jan-2000, In: *Proceedings of the Royal Society B*. 267, 1439, p. 191-195 5 p.

Grenzen aan de groei: Het ene kuiken is het andere niet

Dietz, M. & Klaassen, M., 2000, *De onvrije natuur: Verkenningen van natuurlijke grenzen*. Tinbergen, J., Bakker, J., Piersma, T. & J. V. D. B. (eds.). Utrecht: KNNV, p. 95-100 6 p.

Body-building without power training: Endogenously regulated pectoral muscle hypertrophy in confined shorebirds

Dietz, M. W., Piersma, T. & Dekinga, A., Oct-1999, In: *Journal of Experimental Biology*. 202, 20, p. 2831-2837 7 p.

Estimating organ size in small migrating shorebirds with ultrasonography: An intercalibration exercise

Dietz, M. W., Dekinga, A., Piersma, T. & Verhulst, S., 1999, In: *Physiological and Biochemical Zoology*. 72, 1, p. 28-37 10 p.

Reversible size-changes in stomachs of shorebirds: when, to what extent, and why?

Piersma, T., Dietz, M. W., Dekinga, A., Nebel, S., Gils, J. V., Battley, P. F. & Spaans, B., 1999, In: *Acta Ornithologica*. 34, 2, p. 175-181 7 p.

Daily energy budgets of avian embryos: The paradox of the plateau phase in egg metabolic rate

Dietz, M. W., van Kampen, M., van Griensven, M. J. M. & van Mourik, S., 1998, In: *Physiological Zoology*. 71, 2, p. 147-156 10 p.

Participation of breast and leg muscles in shivering thermogenesis in young turkeys and guinea fowl

Dietz, M. W., Mourik, S. V., Tøien, Ø., Koolmees, P. A. & Tersteeg-Zijderveld, M. H. G., Aug-1997, In: *Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology*. 167, p. 451-460 10 p.

Effect of growth rate and body mass on resting metabolic rate in galliform chicks

Dietz, M. W. & Drent, R. H., 1997, In: *Physiological Zoology*. 70, 5, p. 493-501 9 p.

Growth rate and maturation of skeletal muscles over a size range of galliform birds

Dietz, M. W. & Ricklefs, R. E., 1997, In: *Physiological Zoology*. 70, 5, p. 502-510 9 p.

Ultrasonic measurement of organ size in small birds to study physiological correlates: Basal metabolic rate and thermogenic capacity

Dietz, M., Dekinga, A. & Piersma, T., 1997, *Thermal physiology 1997: Proceedings from the 1997 Symposium on Thermal Physiology*. Johannsen, B. D. & Nielsen, R. (eds.). Copenhagen: The August Krogh Institute, p. 405-408

Parental energy expenditure during brood rearing in the Great Tit (*Parus major*) in relation to body mass, temperature, food availability and clutch size

Tinbergen, J. M. & Dietz, M. W., Oct-1994, In: *Functional Ecology*. 8, 5, p. 563-572 10 p.

The development of thermoregulation in turkey and guinea fowl hatchlings: Similarities and differences

Dietz, M. W. & van Kampen, M., 1-Jan-1994, In: *Journal of Comparative Physiology B*. 164, 1, p. 69-75 7 p.

Development of thermoregulation at the 1st day of life in turkey and guinea fowl: Similarities and differences

Dietz, M. W., Aug-1992, In: *Pflügers archiv-European journal of physiology*. 421, 5, p. R37-R37 1 p.

Energy requirements for molt in the Kestrel *Falco tinnunculus*

Dietz, M. W., Daan, S. & Masman, D., 1992, In: *Physiological Zoology*. 65, 6, p. 1217-1235 19 p.

Glutamate phase shifts circadian activity rhythms in hamsters

Meijer, J. H., van der Zee, E. A. & Dietz, M., 31-Mar-1988, In: *Neuroscience Letters*. 86, 2, p. 177-183 7 p.

The effects of intraventricular carbachol injections on the free-running activity rhythm of the hamster

Meijer, J. H., van der Zee, E. & Dietz, M., 1988, In: *Journal of Biological Rhythms*. 3, 4, p. 333-348 16 p.

Activities

Brian Trevelline

Dietz, M. (Host)

22-Jun-2022

Application of metabarcoding to determine the contribution of arthropod taxa to avian diets: Validation with recorded diets

Verkuil, Y. (Speaker), Nicolaus, M. (Contributor), Ubels, R. (Contributor), Dietz, M. (Contributor), Samplonius, J. (Contributor), Galema, A. (Contributor), Kiekebos, K. (Contributor), de Knijff, P. (Contributor) & Both, C. (Contributor)

12-Feb-2020

Seasonal variation in the gut microbiome of homing pigeons

Dietz, M. (Speaker), Matson, K. (Contributor), Versteegh, M. (Contributor) & Tieleman, I. (Contributor)

11-Feb-2020

Validating the barcode-biomass match: Can DNA barcoding determine the contribution of arthropod taxa to the diet of birds?

Verkuil, Y. I. (Speaker), Ubels, R. (Contributor), Samplonius, J. (Contributor), Nicolaus, M. (Contributor), Dietz, M. (Contributor), Galema, A. (Contributor), Kiekebos, K. (Contributor), de Knijff, P. (Contributor) & Both, C. (Contributor)

28-Jun-2019

Prenatal transfer of gut bacteria occurs in birds: evidence from rock pigeons

Dietz, M. (Speaker), Falcao Salles, J. (Contributor), Hsu, B.-Y. (Contributor), Dijkstra, C. (Contributor), Groothuis, T. (Contributor), van der Velde, M. (Contributor), Verkuil, Y. (Contributor) & Tieleman, I. (Contributor)

13-Feb-2019

Noorderzon Performing Arts Festival Groningen

Dietz, M. (Contributor) & Stamhuis, E. (Contributor)

23-Aug-2017

Keuzecollege Evolutie in beeld: Gastheren en microbiomen

Dietz, M. (Advisor)
2-Feb-2017

Gastheren en microbiomen

Dietz, M. (Invited speaker)
28-Jan-2017

Meet the expert: steriel werken in het veld

Dietz, M. (Invited speaker)
28-Jan-2017

studiedag mentoren

Dietz, M. (Contributor)
6-Sept-2016

Volunteer at Nacht van Kunst & Wetenschap

Dietz, M. (Advisor)
4-Jun-2016

Physiological and Biochemical Zoology (Journal)

Dietz, M. (Editorial board member)
2014 → ...

NIBI onderwijsconferentie

Dietz, M. (Invited speaker)
Jan-2010