***CURRICULUM VITAE* - JEROEN RENEERKENS**

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**ACADEMIC DEGREES**

2007 *PhD* University of Groningen

1999 *MSc degree* (*cum laude*, top 5%) in Biology, University of Groningen

**RESEARCH EXPERIENCE**

2015- present Postdoc(Netherlands Polar Programme), Conservation Ecology Group, University of Groningen, The Netherlands

2014- 2015 Postdoc(Aarhus University research grant), Arctic Ecology Group, Aarhus University, Denmark

2011 - 2017 Postdoc (METAWAD), Animal Ecology Group, University of Groningen

2007 – 2010 Post-doc (International Polar Year grant), Animal Ecology Group, University of Groningen

2000 - 2006 *PhD* at the Royal Netherlands Institute for Sea Research (NIOZ) and University of Groningen

1999 Post graduate research (University of Washington, Canadian Wildlife Service and NIOZ

1998 Master’s project (NIOZ and University of Washington)

1997 Master’s project (NIOZ and University of Groningen)

**PUBLICATIONS**

Schmidt NM, Hardwick B, Gilg O, Høye TT, Henning PK, Meltofte H, Michelsen A, Mosbacher JB,

Raundrup K, **Reneerkens J,** Stewart L, Roslin T (2017) Interaction webs in Arctic ecosystems – determinants of Arctic change. *AMBIO* 46 (Suppl. 1): S12-S25 doi: 10.1007/s13280-016-0862-x

Bulla M, Valcu M, … **Reneerkens J** … Kempenaers B (76 authors) (2016). Unexpected diversity in

socially synchronized rhythms of shorebirds. *Nature*  540: 109–113 doi:10.1038/nature20563

Jouta J, Dietz MW, **Reneerkens J,** Rakhimberdiev E, Hallgrimsson GT, Piersma T, Pen I. (2016)

Ecological forensics: Using single point stable isotope values to infer seasonal schedules of animals after two diet switches. *Methods in Ecology and Evolution*  doi: 10.1111/2041-210X.12695

**Reneerkens J**, Schmidt NM, Gilg O, Hansen J, Hansen LH, Lang J, Sittler B, Piersma T (2016). Effects of

food abundance and early clutch predation on reproductive timing in a high Arctic shorebird exposed to advancements in arthropod abundance. *Ecology* *and Evolution* 6: 7375–7386 doi:10.1002/ece3.2361

Lourenço PM, Alves JA, **Reneerkens J**, Loonstra AHJ, Potts PM, Granadeiro JP, Catry T. Influence of age

and sex on winter site fidelity of sanderlings (*Calidris alba*). *PeerJ* doi: 10.7717/peerj.2517

Loonstra J, Piersma T, **Reneerkens J.** (2016).Staging duration and passage population size of Sanderling

in the western Dutch Wadden Sea *Ardea* 104: 49-61.

Weiser EL, Lanctot RB, …, **Reneerkens J**… Sandercock BK (51 authors) (2016). Effects of geolocators

on hatching success, return rates, breeding movements and change in body mass in 16 species of Arctic-breeding shorebirds. *Movement Ecology* 4: 12.

Conklin JR, **Reneerkens J,** Verkuil YI, Tomkovich P, Palsbøll PJ, Piersma T. (2016). Low genetic

differentiation between Greenlandic and Siberian Sanderling populations implies a different phylogeographic history than found in Red Knots *Journal of Ornithology* 157: 325-332.

Wirta H, Vesterinen E, Hambäck P, Weingartner E, Rasmussen C, **Reneerkens J**, Schmidt NM, Gilg O,

Roslin T. (2015). Exposing the structure of an Arctic food web. *Ecology & Evolution* 5:3842-3856.

Grond K, Ntiamoa-Baidu Y, Piersma T, **Reneerkens J.** (2015). Prey type and foraging ecology of

Sanderlings *Calidris alba* in different climate zones: are tropical areas more favourable than temperate sites? *PeerJ* 3: e1125.

Walker BG, Meddle SL, Romero LM, Landys MM, **Reneerkens J**, Wingfield JC. (2015). Breeding on the

extreme edge: Modulation of the adrenocortical response to acute stress in two High Arctic passerines. *Journal of Experimental Zoology Part A 323:* 266-275

Ntiamoa-Baidu Y, Nuoh A, **Reneerkens J**, Piersma T (2014) Population increases in non-breeding

Sanderlings in Ghana indicate site preference. *Ardea* 102: 131-137

**Reneerkens J**, van Veelen P, van der Velde M, Luttikhuizen P, Piersma T (2014) Within-population

variation in mating system and parental care patterns in Sanderling *Calidris alba* in northeast Greenland. *Auk*: *Ornithological Advances* 131: 235-247

Klaassen RG & **Reneerkens J** (2014). An overview of bird tracking studies in the Netherlands. *Limosa*

87:58-73.

Gilg O, Moe B, Hanssen SA, Schmidt NM, Sittler B, Hansen J, **Reneerkens J**, Sabard B, Chastel O,

Moreau J, Phillips RA, Oudman T, Biersma EM, Fenstad AA, Lang J, Bollache L (2013) Trans-equatorial migration routes, staging sites and wintering areas of a High Arctic avian predator: the Long-tailed Skua (*Stercorarius longicaudus*). *PLoS ONE* 8(5): e64614.

Lemke H, Bowler J, **Reneerkens J** (2012) Establishing the right period to estimate juvenile proportions of

wintering sanderlings via telescope scans in western Scotland. *Wader Study Group Bulletin* 119: 129-132

Hansen J, Schmidt NM, **Reneerkens J** (2011) Egg hatchability in high Arctic breeding wader species

Charadriiformes is not affected by determining incubation stage using the egg flotation technique. *Bird Study* 58: 522-525

Luttikhuizen PC,Bol A, Witte H, van Bleijswijk J, Haddrath O, Baker AJ, Piersma T, **Reneerkens J** (2011)

Novel and cross-species microsatellite markers for parentage analysis in Sanderling *Calidris alba*. *Journal of Ornithology* 152: 807-810

**Reneerkens J**, Grond K, Schekkerman H, Tulp I, Piersma T (2011) Do uniparental sanderlings *Calidris*

*alba* increase egg heat input to compensate for low nest attentiveness? *PLoS ONE* 6(2): e16834.

**Reneerkens J**, Benhoussa A, Boland H, Collier M, Grond K, Günther K, Hallgrimsson GT, Hansen J,

Meissner W, de Meulenaer B, Ntiamoa-Baidu Y, Piersma T, Poot M, van Roomen M, Summers RW, Tomkovich PS, Underhill LG (2009) Sanderlings using African–Eurasian flyways: a review of current knowledge. *Wader Study Group Bulletin* 116: 2–20

**Reneerkens J**, Versteegh MA, Schneider AM, Piersma T, Burtt EH (2008) Seasonally changing preen-wax

composition: Red Knots' (*Calidris canutus*) flexible defense against feather-degrading bacteria? *Auk* 125: 285-290

Rijpstra WIC, **Reneerkens J**, Piersma T, Sinninghe Damsté JS (2007) Structural identification of the beta-

hydroxy fatty acid-based diester preen gland waxes of shorebirds. *Journal of Natural Products* 70: 1804-1807

**Reneerkens J**, Almeida JB, Lank DB, Jukema J, Lanctot RB, Morrison RIG, Rijpstra WIC, Schamel D,

Schekkerman H, Sinninghe Damsté JS, Tomkovich PS, Tracy DM, Tulp I, Piersma T (2007) Parental role division predicts avian preen wax cycles. *Ibis* 149: 721-729

**Reneerkens J**, Piersma T, Sinninghe Damsté JS (2007) Expression of annual cycles in preen wax

composition in red knots: Constraints on the changing phenotype. *Journal of Experimental Zoology* 307A: 1 27-139

Versteegh M, **Reneerkens J**, Piersma T (2006) Seasonal shifts in uropygial gland secretions in Red Knots:

a flexible defense against feather-degrading bacteria? *Journal of Ornithology* 147: 36.

**Reneerkens J**, Piersma T, Sinninghe Damsté JS (2005) Switch to diester preen waxes may reduce avian

nest predation by mammalian predators using olfactory cues. *Journal of Experimental Biology* 208: 4199-4202

**Reneerkens J**, Korsten P (2004) Plumage reflectance is not affected by preen wax composition in red knots

*Calidris canutus*. *Journal of Avian Biology* 35: 405-409

Piersma T, Lindström A, Drent RH, Tulp I, Jukema J, Morrison RIG, **Reneerkens J,** Schekkerman H,

Visser GH (2003) High daily energy expenditure of incubating shorebirds on High Arctic tundra: a circumpolar study. *Functional Ecology* 356-362

Krijgsveld KL, **Reneerkens J**, McNett GD, Ricklefs RE (2003) Time budgets and body temperatures of

American golden plover chicks in relation to ambient temperature. *Condor* 105: 268-278

**Reneerkens J**, Piersma T, Sinninghe Damsté JS (2002) Sandpipers (Scolopacidae) switch from monoester

to diester preen waxes during courtship and incubation, but why? *Proceedings of the Royal Society of London series B-Biological Sciences* 269: 2135-2139

**Reneerkens J**, Piersma T, Ramenofsky M (2002) An experimental test of the relationship between

temporal variability of feeding opportunities and baseline levels of corticosterone in a shorebird. *Journal of Experimental Zoology* 293: 81-88

**Reneerkens J**, Morrison RIG, Ramenofsky M, Piersma T, Wingfield JC (2002) Baseline and stress-induced

levels of corticosterone during different life cycle substages in a shorebird on the High Arctic breeding grounds. *Physiological and Biochemical Zoology* 75: 200-208

Piersma T, **Reneerkens J**, Ramenofsky M (2000) Baseline corticosterone peaks in shorebirds with maximal

energy stores for migration: A general preparatory mechanism for rapid behavioral and metabolic transitions? *General and Comparative Endocrinology* 120: 118-126

**PUBLICATIONS IN PREPARATION**

**Reneerkens J**, Piersma T. Sex difference in true annual survival of Sanderling (*Calidris alba*)

wintering in Mauritania. (Manuscript for *Journal of Avian Biology*)

Schmidt NM, Hansen J, Christensen T, **Reneerkens J**, Meltofte H. Directional changes in a high Arctic

avian community during a period of rapid ambient warming. (Manuscript for *Polar Research*)

**Reneerkens J**, Versluijs T, Alves J, Boorman M, Hallgrimsson GT, Ntiamoa-Baidu Y, Nuoh A, Potts P,

Piersma T. Range-wide fitness consequences of migration strategies in a shorebird. (Manuscript for *Current Biology*)

Moreau J, Perroud L, Bollache L, Yannic G, Teixeira M, Schmidt NM, **Reneerkens J**, Gilg O.

Discriminating uni- and biparental incubation patterns by monitoring nest temperature. (Submitted to *Ibis*)

**RESEARCH FUNDING OBTAINED**

* New Netherlands Polar Programma - NWO/ALW 256 k€ (2015)
* Guest researcher grant - Aarhus University (2014)
* INTERACT grants for international access for transport to and accomodation in Northeast Greenland (2011, 2012, 2014)
* World Wildlife Fund, 25 k€ grant for fieldwork in Greenland (2013)
* METAWAD, 3 m€ grant from the Dutch Ministery of Infrastructure and the Environment (2011) (with Prof. Dr. T. Piersma)
* Several travel and publishing grants for an accompanying journalist to write a popular scientific book about my field research (2007)
* NWO */*  International Polar Year, 3-year post-doc grant 332k€ (2006) (with Prof. Dr.T. Piersma)
* Travel grant Working Group International Waterbird and Wetland Research for 1 month, 3 persons expedition to Mongolia (2005)
* NWO / Netherlands Arctic Programme 15 k€ (2003) (with Prof. Dr. T. Piersma)

**EDITORIAL BOARDS**

* *Ibis*, *the international journal of avian science*, associate editor; 2012 – present
* *Wader Study*, editor; 2013- present
* *Limosa*, Dutch ornithological journal, editor; 2002-2014

**TEACHING**

* Ecology & Evolution, BSc course, University of Groningen (2011, 2012, 2013, 2016)
* Database management with Access (full week), PhD course, Legon University, Accra (2015)
* Conservation Biology (Lecture), BSC course, University of Groningen (2011)
* Ecological Interactions (organisation, month of lectures and practicals) BSc course, University of Groningen (2010)
* Ecological Interactions field course, University of Groningen (2010-2012)

**SUPERVISION BACHELOR, MASTER AND PHD STUDENTS**

**Maaike Versteegh** – MSc– Effect of uropygial gland secretions on feather degrading bacteria (2005)

**Edward Koomson** – Phd– Costs and benefits of long-distance migration in shorebirds, co-supervision

(2007-2009)

**Kirsten Grond** – MSc – Foraging ecology Sanderlings in Ghana and Netherlands (2008)

MSc – Incubation strategies and egg temperature in Sanderling (2009)

**Sven Bergraat** – MSc – Stopover ecology Sanderlings Iceland (2009)

**Kirsten Grond** – MSc – Incubation patterns and egg temperature Sanderlings on Greenland (2009)

**Anneriek van Gasteren & Dolf van der Gaag** – BSc– Field course on stopover ecology on Iceland (2011)

**Lars Gaedicke** – MSc – Winter ecology of Sanderlings in the Netherlands (2010-2011)

**Stefan Sand** – MSc – Nest survival of uni- and biparental Sanderlings in Greenland (2012-2013)

**Pieter van Veelen** – MSc – Genetic and social mating systems Sanderling (2013)

**Jelle Loonstra** – BSc - Sex determination in sanderlings *Calidris alba* using biometry of

molecularly sexed individuals (2012)

MSc– Stopover ecology, staging duration and passage population size of Sanderlings in

the Wadden Sea (2013, 2014, 2015)

**Anneriek van Gasteren** – MSc - Differential migration Sanderlings (2014)

**Marleen Eijkelenboom –** BSc –Food web interactions in the High Arctic, literature study (2014)

**Tom Versluijs** – MSc – Differential timing of spring migration in Sanderling (2014- present)

**Jones Quarty** – Phd– University of Ghana - co-supervision – (2014-present)

**Benjamin Gnep** –MSc – Sanderling stopover ecology (2015-2016)

**Marleen Eijkelenboom –** MSc – Adjustments in incubation behaviour dependent on the risk of predation

(2016-2017)

**Emma Penning**  **–**  PhD student **–** Shorebird responses to the restructuring of the island of Griend, Dutch

Wadden Sea (2016- present)

**Jesse Jorna –**  MSc student **–** Trophic mismatches in Arctic insectivorous migratory birds **-**  Colloquium (2016)

**Several students of Dutch laboratory schools** – Gas and mass specrometry uropygial gland secretions

**Numerous** **BSc students** – Literature reviews, colloquia, analysis for courses Ecology & Evolution,

Course ‘Writing grant proposals’ etc.

**INTERNATIONAL NETWORK OF SANDERLING DEMOGRAPHY**

Since 2007, I manage a large mark-resighting project on Sanderlings *Calidris alba*, a long-distance migratory bird breeding in the High Arctic. With the help of many collaborators, I have individually marked 8,000 Sanderlings along the East Atlantic Flyway in the breeding grounds in Greenland, during a migration stop-over site in Iceland and various wintering areas between Scotland and Namibia. Currently the database consists of 59,800 unique resightings of these animals by international collaborators in Africa (Namibia, Ghana and Maurtania) and Europe (Portugal, France, Great Britain, Scotland and Iceland). A large network of more than 1,500 volunteer observers enables a large spatial scale of plenty observations which are needed to get accurate estimates of annual and seasonal survival of adult Sanderlings during different periods of the year and in different areas along the migration route. Furthermore, accurate estimates of daily nest survival and daily chick survival in Greenland are available. Since 2016, I use an interactive internet portal for colour-ring observations: <http://www.animaltrack.org> which I intensively supported throughout the developing phase.

**ADMINISTRATIVE EXPERIENCE**

* Peer-reviews for international journals; approximately 1 per month. So far for more than 30 journals including *Proc Roy Soc Lond B*, *Biology Letters*, *Oikos*, *Oecologia*, *Behavioral Ecology*, *Functional Ecology*, *Ecosystems*, *Journal of Avian Biology, Arctic etc*. My Publons account (up to date since 2015): <https://publons.com/author/1173104/jeroen-reneerkens#profile>
* Review of PhD grant applications (Marsden Fund, New Zealand)
* Organisational experience within the Willem Barentz Polar Institute, which coordinates polar research activities in the Netherlands
* Co-organisation of a four-day meeting of the Arctic Migratory Bird Initiative (AMBI), a project of the Conservation of Arctic Flora and Fauna (CAFF) which is the working group on biodiversity within the Arctic Council. Texel, Netherlands 5-8 April 2016.
* Co-organisation of the International Wader Study Group conference, Texel, the Netherlands 18-21 September 2009
* Organisation and initiative taker for workshop on Sanderling ecology, International Wader Study Group conference, Jastrzebia Góra, Poland 5 October 2008

**PUBLIC OUTREACH**

* Numerous international and national journals, newspapers, radio and television interviews
* A Dutch popular scientific book (336 pp) “*A Greenlander in Africa. The amazing journey of sanderlings*” (Publisher: Bert Bakker) about my field research was published (2010; 3 editions now sold out) and avaliable as e-book since 2012 (Fosfor Publishers).
* Subject of a video weblog from Greenland (6 episodes) - Birdlife Netherlands
* 1-6 times annually I orally present my scientific results to broad non-scientific audiences