Annual Report 2011, Naturalis Research
Department of Terrestrial Zoology – Reptiles and Amphibians

Researcher / Curator
Arntzen, J. W. (Pim)

Associates
Alphen, J. van (Jacques)
Galis, F. (Frietson)
Rooijen, J. van (Johan)
Ross, F. D. (Franklin)
Sparreboom, M. (Max)
Vonk, F. (Freek)
Ziemann, J. M. (Janine)
Zuiderwijk, A. (Annie)

PhD-student
Wielstra, B. (Ben), PhD-student in combination with the ITC, Enschede (co-supervisors Prof. A. Skidmore and Dr. B. Toxopeus)

Student
Meilink, W. (Willem), Institute of Biology, University of Leiden

Academic visitors
Dr. Ana Ivanovic (Belgrade), Prof. R. Manjunatha Kini (Singapore) and Prof. G. P. Wallis (Dunedin)

Presentations
Arntzen – ‘Assessing effective size, dispersal and origin of amphibian populations’ on 8/2/ at the Netherlands Annual Ecology Meeting, Lunteren.
Arntzen – ‘Deep phylogeography’, colloquium on 14/6 at NCB Naturalis.
Arntzen, Wallis and Wielstra each gave an introductory talk into their research for the Department of Evolutionary Biology at the Institute for Biological Research, University of Belgrade on 17/5.
Ivanovic – ‘Evolution of the cranium in Triturus newts (Caudata, Salamandridae) explored through phylogeny and sophisticated geometric morphometrics by micro-CT scanning’, colloquium on 27/9 at NCB Naturalis.
Manjunatha Kini – ‘Origin and evolution of prothrombin activators in snake venom’, colloquium on 22/03 at NCB Naturalis.
Manjunatha Kini, IBL Top lecture on 11/3 ‘Fascinating future in snake venom research’.
Wallis, IBL Top lecture on 20/5 ‘Extreme positive selection on a highly-expressed larval ZP-domain gene in Galaxias fishes’.

Wielstra – ‘The postglacial shifting interchange of two Triturus newts’ on 28/9 for the Societas Europaea Herpetological meeting, Trier.

Fieldwork
1-24/4 and 25/6-3/7 fieldwork in Spain and Portugal, 935 samples on 71 localities.
25/4 – 6/5 – fieldwork in depts. Pas-de-Calais and Mayenne, France.
15-25/5 – fieldwork in Serbia, Macedonia and Greece with Ben Wielstra and Graham Wallis, 429 samples on 61 localities.

Workshops
ConGRESS mid-term meeting at Trento, Italy 18-21/9.
FroSpects ‘Hybridization and Speciation’ workshop, Newtown, Wales 24-26/10.

Education
Contributions to the IBL MSc.-course ‘Trends in Time and Space’ with lectures and a practical on phylogeography, hybrid zones, gene flow and dispersal on 7/11.
Contributions to the IBL BSc.-course ‘Biodiversity 2’ with practical on the systematics of chameleons, from 31/10-11/11.

Editorial and review
Editor in chief of Contributions to Zoology. Reviewer for e.g., Conservation Genetics, Evolution, Molecular Ecology and Oryx. Reading committee for a PhD.-thesis submitted at the University of Leiden. Reviewer grant application for the Austrian Science Fund.

Applications for funding Grant applications (successful or pending)
‘Change in amphibian metapopulation connectivity from three decades of environmental decline’, with the Schure Beijerinck Popping Fonds’ (J. W. Arntzen, awarded)
‘De hybride-zone tussen de gewone pad (Bufo bufo) en haar pas ontdekte cryptische zustersoort’ with the ‘Schure Beijerinck Popping Fonds’ (J. van Alphen & J. W. Arntzen, pending)
‘Isolation-proof nature conservation: increasing landscape permeability of agricultural areas’, with NWO-ALW (Prof. G. de Snoo, Drs. K. Trimbos, J. W. Arntzen et al., pending)

Publication impact
Citation score 2249 (was 2045); H-index 27 (was 26)
Jaques van Alphen
In 2011 JvA initiated research to study the factors determining biodiversity of amphibians in cow pools in the Central Thierache (Aisne, France). Between April 4 and May 17, 60 pools were located and an inventory was made of their amphibian fauna by using funnel traps and hand nets. Nine species of amphibians were found, of which four species of newts. A total of 15500 newts were caught. Further analysis will show how diversity depends on distance to the forest, distance to nearby pools, the presence and density of hedges, depth and desiccation risk of pools, vegetation in the pool etc.

Publication impact
Citation score 4685; H-index 41

Frietson Galis

International Collaborations
Prof. Russell Lande, Royal Society Professor, Imperial College, Silwood Park, UK
Prof. John Opitz, University of Utah, Salt Lake City, USA
Prof. David Carrier, University of Utah, USA
Prof. Lauren Chapman, McGill University, Montreal, Canada
Prof. Stefan Van Dongen, University of Antwerp, Belgium
Dr. J. Bots, University of Antwerp, Belgium
A. J. Bakker Msc, John Innes Institute, Norwich, UK

Collaborations in the Netherlands
Dr. Annemie Ploeger, Developmental Psychology, Department of Psychology, University of Amsterdam (UVA)
Prof. E. Bakker, Clinical genetics, Leiden University Medical Centre
Dr. Marianna Bugiani, Clinical Pathology, VU University Medical Center (VUMC)
Dr. Z. Bochdanovits, VU University Medical Center, Human Genetics (VUmc)
Dr. Marcel Mannens, Clinical Molecular genetics, Amsterdam University Medical Centre (AMC)
Dr. Jet Bliek, head DNA diagnostics lab of clinical genetics, Amsterdam University Medical Centre (AMC)
Dr. Mariëlle Alders, Clinical Molecular genetics, Amsterdam University Medical Centre (AMC)
Dr. P. Nikkels, Paediatric pathology, Utrecht University Medical Centre (UMC)
Prof. Johan A. J. Metz, mathematical biology, IBL
Dr. Tom J. M. van Dooren, NCB Naturalis

Editorial boards
Editorial board Journal of Experimental Zoology B. (Molecular Developmental Evolution), The Open Evolution Journal, Animal Biology, Embryology domain of Scientific World

Boards and committees of Societies
President of the European Society for Evolutionary Developmental Biology (EED), re-elected in 2010, Co-Chair of the scientific committee for the 3rd meeting of the EED in Paris 2010

Study visits
Two week study supported by Synthesys at the Royal Africal Museum in Tervuren, Belgium (February, 2011)
One week study, supported by Synthesys, at the Natural History Museum in London, UK (March 2011)
Two days at the Royal Belgian Institute of Science, Brussels, Belgium (December 2010)
Two three-day visits to Lisbon for the organization of the 4th meeting of the European Society for Evolutionary Developmental Biology (EED)

Applications for funding
Synthesis proposal for a ten day study at the Natural History Museum in Berlin to study mammalian skeletons - awarded
Synthesis proposal for a ten day study at the Natural History Museum in Copenhagen to study mammalian skeletons - awarded
Grant of 4000 € of the Company of Biologists to invite four keynote speakers for the 4th Congress of the European Society for Evolutionary Developmental Biology (EED) in Lisbon – awarded

Academic visitors
Prof. Russell Lande, Royal Society Professor, Imperial College, Silwood Park, UK
Prof. John McNamara, University of Bristol, United Kingdom
Prof. David Carrier, University of Utah, Salt Lake City, USA
Prof. Stefan Van Dongen, University of Antwerp, Belgium
Dr. A. Ploeger, University of Amsterdam, The Netherlands

Teaching and supervision
Post-doc - Dr. Jessica Bots, University of Antwerp, Belgium.
PhD-student – Clara Ten Broek, University of Antwerp, Belgium.

Reviewer for

Media attention
Consulted as expert on the evolution of dogs (Volkskrant) and the evolution of Hox genes (NRC Handelsblad).
Invited talks
Natural History Museum London, March 2011

Publications impact (per 10/12/2009)
Citations Web of Science 1013 (last year 918)
H-index Web of Science 19 (17 last year)

Franklin Ross


Johan van Rooijen

Fieldwork
Survey in Sarawak, Borneo, to study and model the snake species richness

Max Sparreboom

Presentation
‘Die Aufzucht von *Tylototriton/Echinotriton* Arten’ at the meeting of the DGHT-AG Urodela, Gersfeld 15 October.

Fieldwork
Excursion to Ryukyu Islands, Japan to study *Cynops ensicauda* and *Echinotriton andersoni* during the breeding season, from 14 to 22 May 2011.

Reviews
Manuscripts reviewed for Asian Herpetological Research and Herpetological Journal and species entries for Salamanders of China Life Desk.
Freek Vonk

Fieldwork
Expeditions to Africa to collect venom samples

Presentations
Indian conference for Toxinology (India, invited)
Netherlands Annual Ecology Meeting honorary lecture (Lunteren, invited)

Grants
The Herpetofauna Foundation

Students
Kerkkamp, H. (Harald), working on snake genomics
Corine Manuputty, working on snake venom testing in cancer metastasis essays

Science communication
Many different media appearances from DWDD to National Geographic to children’s television to radio.

Grant reviewing
Research Foundation Flanders (FWO), Belgium
Sultan Qaboos University, Oman

Editor
Journal of Venom Research

Janine M. Ziermann

Students
van der Pol, N. (Niels): BSc.: HoxC6 and D8 expression in three different Triturus species during their embryonal development; February 2011 – continuing.
Stolk, B. (Bas) MBO, Hox C9 and D9 expression during development of Triturus carnifex; September 2010 – May 2011.
Koelma, N. (Nynke) Bachelor of applied science: Hox evolution in vertebrates; February– Juni 2011.

Review
Journal of Morphology

Presentation
October 2011: Integrative Zoology, Institute for Biology, Leiden, The Netherlands
‘Biodiversiteit en vergelijkende zoölogie’

Applications for funding
Developmental mechanisms of the chromosome 1 syndrome in crested newts (*Triturus* spp.).
NWO Innovational Research Incentives Scheme VENI

Annie Zuiderwijk

Fieldwork
From 19/3-9/4 and 23/4-30/5 in Pas-de-Calais, France
Four reptile and two amphibian transects for the RAVON monitoring scheme in the Netherlands

Student
W. R. M. Meilink

International Collaborations
Professor Dr. J. Lescure and Jean-Christophe de Massary, Chargé de mission Amphibiens-Reptiles, Service du Patrimoine Naturel, Muséum National d'Histoire Naturelle, Paris, France
Julie Robillard, Parc Naturel Regional des Caps et Marais d'Opale, Manoir du Huisbois, Le Wast, Pas de Calais, France

Collaborations in the Netherlands
Regional coordinator reptiles for RAVON

Grant
Grant of 3.000 € of the ‘Annie_Zuiderwijk_Fund’ in support of fieldwork in Pas-de-Calais

Media attention
Interview as winner of the Lenders prize, in RAVON 41: 78-83

Team productivity over 2011
Papers in SCI-listed journals


**Non SCI-listed journals**


**Sparreboom, M.** (2011). Koreanische und japanische Urodelen, ein Reisebericht. amphibia, 10: 19-25


**Book chapter**
Sparreboom, M. (2011) 32 new entries on Website ‘Salamanders of the Old World’
http://science.naturalis.nl/salamanders.

**Student reports**

**Publications by third parties (including older papers not listed previously)**


