



**Report of the**

## **UNEP/CMS Thesis Award 2005**

**sponsored by**

**National Geographic Deutschland and Deutsche Lufthansa**



## **Impressum:**

This report on the results of the “UNEP/CMS Thesis Award 2005” (winner elected 27<sup>th</sup> July 2005) in Bonn was compiled by Muriel M. Mannert (UNEP/CMS, Bonn) and Dr. Klaus Riede (GROMS, Bonn).

The UNEP/CMS Thesis Award is supported by National Geographic Deutschland and Deutsche Lufthansa. The evaluation of the UNEP/CMS winner was supported by Forschungsmuseum Koenig, Bonn (<http://www.museumkoenig.de>).

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### **Contact Address:**

UNEP/CMS Secretariat  
United Nations Premises in Bonn  
Martin-Luther-King-Strasse 8  
53175 Bonn, Germany

email: [cms@cms.int](mailto:cms@cms.int)

fax: +49-(0)228-815-2449



**National Geographic Deutschland and Lufthansa**  
herewith launch at the occasion of the 25th Anniversary of the  
**Convention on the Conservation of Migratory Species**  
**of Wild Animals (UNEP/CMS)**  
a new award for the most outstanding PhD thesis on the biology of  
migratory species of wild animals.

## Thesis Award on Migratory Species Conservation

The award, amounting to  
**10,000 EURO**

will be awarded every three years at the Conference of the Parties to  
CMS, and for the first time at the 8th meeting of the CMS Conference  
of the Parties in 2005, in affiliation with Museum Koenig, Bonn.

Details on the application procedure will be published in early  
2005 on the CMS website, in the CMS Bulletin as well as in the National  
Geographic Deutschland Magazine and Lufthansa publications.



UNEP/CMS Sekretariat  
Martin-Luther-King-Str. 8  
D-53175 Bonn, Germany  
Tel: ++49 228 815 2401/02  
Fax: ++49 228 815 24 49  
e-mail: [secretariat@cms.int](mailto:secretariat@cms.int)  
web: [www.cms.int](http://www.cms.int)

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## Preface

On the occasion of the 25<sup>th</sup> Anniversary of the Convention on the Conservation of Migratory Species of Wild Animals (UNEP/CMS or Bonn Convention) National Geographic Deutschland and Lufthansa donate an Award for the most outstanding PhD thesis on the biology of migratory species of wild animals amounting to 10,000 EURO.

The UNEP/CMS-Thesis Award recognizes and supports exemplary work in the field of migratory species. Each 3 years CMS to grants an earmarked or uncommitted Award to a doctoral thesis with direct relevance for migratory species or practical nature conservation measures and which is serving to extend, modificate or complete the Global Register on Migratory Species (GROMS). All dissertations have already be accepted and evaluated. Therefore, we should take it for granted that they are scientifically and methodologically sound. But the main focus of your review of a scientifically solid dissertation should be the potential value of the study for CMS and the conservation of migratory animals.

The granting of the Award will take place every 3 years simultaneously with the CMS Conference of the Parties (COP8) in Nairobi, Kenya November 10-18, 2005). The candidate must attend the COP, present his work and mention his further plans. An outline of the importance for CMS should be clarified through a laudation.

For the first UNEP/CMS Thesis Award 36 applicants from 21 nations arrived. Most of the abstracts submitted were interesting and valuable contributions to the knowledge about migratory species. All applications are located here: [http://131.220.109.5/groms/Thesis\\_Award2005/Award2005.php](http://131.220.109.5/groms/Thesis_Award2005/Award2005.php)

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## **UNEP/CMS Thesis Award on Migratory Species Conservation**

For the promotion of scientific co-operation (basic research) and applied nature protection the Secretariat of the Bonn Convention on Migratory Species has established a prize for the best thesis in the field of migratory species. The reason is the 25<sup>th</sup> anniversary of the Bonn Convention and the conclusion that scientific results from the basic research often flow into nature protection practice with a delay of many years. Particularly the international nature conservation sector that is essential for the protection of migratory species has benefited over the past years from new methods such as satellite telemetry, DNA-fingerprinting etc. Migration routes can be mapped more exactly and the level of threat of individual populations can be measured better.

The Award should point out positive examples of co-operation between international nature protection organisations and scientists and help to intensify and improve collaboration. Accepted are finished doctoral theses including scientific results with direct effects on the protection of migratory animal species or results that can be implemented in nature conservation measures. An acknowledged educational institution must have accepted the work as dissertation thesis; the graduation should not be longer than 1 year in the past. A committee consisting of international experts will preselect the theses.

The applicant must register in an online database and provide an English translation of the title and an English summary as well as references to the candidate's articles reviewed by journals so far. Only after a preselection the complete version of the doctoral thesis is requested for further examination.

The Award ceremony takes place every 3 years on the occasion of the Conference of Parties of the Bonn Convention (COP) at alternating locations, and for the first time at the 8<sup>th</sup> meeting of the CMS COP in 2005. National Geographic Deutschland and Lufthansa donate the prize.

### Table of the Top 8

Candidates in alphabetical order, title of the thesis and Educational Institute/University

Candidate's name	Thesis title	Educational Institute / University:
<b>Hogan, Zeb</b>	The Ecology, Genetics, and Conservation of Migratory Catfish (Pangasiidae) in the Mekong River	University of California, Davis
<b>Hucke-Gaete, Rodrigo</b>	Distribution, Habitat preference and Dynamics of the blue whale in Chile: 1997-2004	Universidad Austral de Chile
<b>Yohannes, Elizabeth</b>	Causal Analysis of Spatio-Temporal Patterns of Passerine Migration along the Eastern Africa Flyway	Leopold-Franzens-University of Innsbruck
<b>Kaatz, Michael</b>	The migration of the Eastern European White Stork ( <i>Ciconia ciconia</i> ) over Middle East to Africa	Martin-Luther-Universität Halle-Wittenberg
<b>Kaschner, Kristin</b>	Modelling and Mapping Resource Overlap between Marine Mammals and Fisheries on a Global Scale	Fisheries Centre, University of British Columbia, Vancouver, Canada
<b>Rana, Gargi</b>	General Ecology of Siberian cranes ( <i>Grus leucogeranus</i> ) released in Keoladeo National Park, Bharatpur, India	Mumbai University
<b>Rodríguez, Carlos</b>	Environmental factors related to the breeding success of the lesser kestrel. Climate change and Agriculture intensification Falcon-Spain	University of Salamanca
<b>Scheiffarth, Gregor</b>	Born to fly – Migratory strategies and stopover ecology in the European Wadden Sea of a long-distance migrant, the Bar-tailed Godwit ( <i>Limosa lapponica</i> )	University of Oldenburg

### The winner:

The jury selected as the first laureate Zeb Hogan for his work on the migratory giant Catfish in the unique Mekong ecosystem. With his thesis on the critically endangered Mekong Giant Catfish (*Pangasiidae*) Zeb Hogan has made a significant contribution to improve its conservation status under the Convention. The relevance to the vision and goals of UNEP/CMS to protect and improve the conservation status of migratory animals made this thesis rank at the top. He tagged the freshwater fish and thus collected new data about its migration patterns and developed efficient conservation strategies some of which have already been implemented. By including local stakeholders such as fishermen, his concept provides for sustainable use of the species.



Dr. Zeb Hogan received his Ph.D. in Ecology from the University of California, Davis in 2004. He is currently a postdoctoral fellow at the Center for Limnology, Wisconsin in Madison. He also holds an honorary position as a World Wildlife Fund Senior Conservation Science Fellow. His research interests include migratory fish ecology, multi-species fisheries management, the population status and of giant freshwater fish, endangered species issues, and conservation genetics. Zeb's most recent article, "The Imperiled Giants of the Mekong", was the feature story of the May 2004 issue of *American Scientist*.

Since 1996, Zeb has worked primarily in the lower Mekong River Basin. He has been studying the giant Mekong catfish (*Pangasianodon gigas*) and other large fish of the lower Mekong River, and has served as director of the Mekong Fish Conservation Project (MFCP). The MFCP works to merge conservation science with conservation education and action. The project's outputs to date have included important contributions to understanding the migratory patterns and population structures of focal fish species; designation of the giant Mekong catfish as critically endangered on the IUCN Red List; awareness-raising through international media and local communications about the plight of giant catfish; and the live release of numerous rare catfish otherwise destined for fish markets.

In 2005-2006, the major objectives of the MFCP and its partners include the participatory assessment of conservation options for giant catfish, the development of a global conservation strategy for Mekong giant catfish, conservation assessments of key Mekong fish species, technical, logistical, and financial support for national-level conservation initiatives, the publication of reports and background information on the Mekong giant catfish, and ecological and migration studies to provide information for better management of the Mekong giant catfish and other endangered species.

In addition to ongoing efforts in the Mekong, Zeb is working on two new projects: *Salmon Conservation in Mongolia through Sustainable Fly-fishing* and *Ecology and Conservation of the World's Largest Freshwater Fish*. Zeb was recently designated an Emerging Explorer by the National Geographic Society. As an Emerging Explorer, Zeb will travel to Earth's most diverse freshwater ecosystems in search of the world's largest freshwater fish and to investigate the causes behind the global loss of freshwater biodiversity.



**Hogan, Zeb****E-Mail Address:** zhogan@wisc.edu**Institution:** University of California, Davis**Street:** E Mifflin St 2108**City:** 53704 Madison**Country:** United States**Title:**

The Ecology, Genetics, and Conservation of Migratory Catfish (Pangasiidae) in the Mekong River

**Alternate title:**

The Imperiled Giants of the Mekong: The Study and Conservation of Southeast Asia's Large, Migratory Catfish

**Subject / Field of Research:** Ecology / Fisheries / Conservation**Date of Graduation:** 10/08/04**Educational Institute / University:** University of California, Davis**Supervisor(s):** Dr. Peter Moyle and Dr. Bernie May**Short Statement:**

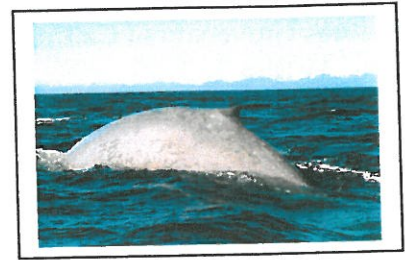
Dispersal and migration are critical to the persistence of natural populations. Specifically, information about migratory patterns of fish are important when managing for viable populations. Without information about migratory patterns, threats such as habitat degradation, the proliferation of dams, and overfishing can unwittingly lead to rapid declines in fisheries and to species extinction. In fact, worldwide, over one hundred migratory fish stocks have gone extinct as a result of poor management, overfishing, dam building, and habitat degradation. In Southeast Asia, the Mekong River supports a vast freshwater fishery. One of the species caught by local fishers is the Mekong giant catfish (*Pangasianodon gigas*), which, according to The Guinness Book of World Records, is the planet's largest freshwater fish - it can measure 3 meters long and weigh 300 kilograms. But fewer and fewer examples of this huge fish have turned up in nets recently, and last year the World Conservation Union added this catfish to its list of critically endangered species. Although the loss of this charismatic fish would be a tragedy in itself, the plight of the Mekong giant catfish also highlights the precarious position of other large, migratory species inhabiting the Mekong River. Understand the migratory behavior of these fish improves the chances for their long-term conservation. The results of the study have important implications for the sustainable development of the basin and the long-term management of migratory species.

**Online Publication:**

<http://www.americanscientist.org/template/AssetDetail/assetid/32587;jsessionid=baaavhwIZcfOVM>

**Hucke-Gaete, Rodrigo**

**E-Mail Address:** rhuckeg@telsur.cl  
**Phone Number:** 56 63 200461  
**Fax Number:** 56 63 221344  
**Institution:** Universidad Austral de Chile  
**Street:** Isla Teja 567  
**City:** 567 Valdivia  
**Country:** Chile

**Title:**

Distribution, Habitat preference and spatial dynamics of the blue whale in Chile: 1997-2004

**Original Title:**

DISTRIBUCIÓN, PREFERENCIA DE HÁBITAT Y DINÁMICA ESPACIAL DE LA BALLENA AZUL EN CHILE: 1997-2004

**Subject / Field of Research:** Ecology and conservation biology

**Date of Graduation:** 25/11/04

**Educational Institute / University:** Universidad Austral de Chile

**Supervisor(s):** Dr. Carlos Moreno, Dr. Roberto Schlatter, Dr. Victor Marin & Dr. Humberto Gonzalez

**Short Statement:**

The extensive migrations and consequent inaccessibility of blue whales in the Southern Hemisphere, has made research difficult and knowledge of this species' ecology and status is still limited. Few places in the world have been found where blue whales can be located predictably near the coast; but fortunately, such is the case of a site discovered in the Gulf of Corcovado and adjacent waters, off southern Chile, one of the main results from this doctoral thesis. Other relevant outcomes from this thesis include a conceptual model of the processes that most likely determine the exceptional productivity of the area and thus make it attractive to blue whales and their enormous feeding requirements. This large and complex estuarine-type system seems to allow an important fraction of blue whales to obviate their traditional migration to Antarctic feeding grounds and remain within these waters at least throughout Austral summer months. Some animals seem to remain longer, while others apparently commence migratory movements by the end of March. These results suggest that some blue whale populations or fractions of the same population may have specialized in using an alternative life strategy, other than the traditional migration in baleen whales, by selecting and exploiting particularly productive areas in low to mid latitudes which are most conducive to feeding success. The importance of the Chiloé-Corcovado area, with its adjoining system of channels and fjords, to this endangered species is evident due to the fact that whale densities found here have no precedent in all of the Southeast Pacific and is, arguably, the most important feeding and nursing area for blue whales throughout the Southern Hemisphere. This discovery provides a unique opportunity to further understand blue whale ecology and use this knowledge into developing sound recommendations for the conservation of these, the largest animals on Earth.

**Online Publication:** [http://www.ballenazul.org/archivos/hucke\\_Gaete\\_et\\_al\\_blue\\_whale\\_discovery.pdf](http://www.ballenazul.org/archivos/hucke_Gaete_et_al_blue_whale_discovery.pdf)

**Publications:** Hucke-Gaete, R., L.P. Osman, C.A. Moreno, K.P. Findlay & D.K. Ljungblad (2004). Discovery of a blue whale feeding and nursing ground in southern Chile. *Proc. R. Soc. Lond. B (Suppl.)*, *Biology Letters* 271 S170-S173



**Yohannes, Elizabeth****E-Mail Address:** yohannes@erl.orn.mpg.de**Phone Number:** +49 8152 373 151**Fax Number:** +49 8152 373 170**Institution:** Max Planck Institute for Ornithology**Street:** Von-der-Tann Str. 7**City:** 82346 Andechs**Country:** Germany**Title:****Causal Analysis of Spatio-Temporal Patterns of Passerine Migration along the Eastern Africa Flyway****Subject / Field of Research:** Ornithology/Animal Ecology**Date of Graduation:** 14/02/05**Educational Institute / University:** Leopold-Franzens-University of Innsbruck**Supervisor(s):** Dr. Ellen Thaler and Dr. Herbert Biebach**Short Statement:**

In the dissertation there were a narrow geographical location at latitudes north of 10°N and 8°N in northeast Africa identified as an important area for migratory species conservation. During autumn migration after birds cross the Sahara Desert and arrive in northeast African, most birds interrupt migration and spend 1.5 to 3 months before resuming migration. Migratory species use this location to fuel energy resources and gain body mass before and after crossing the Sahara Desert in autumn and spring. During the extended stopover, birds undergo partial moult in this region. Although trapping and observational data indicated that birds stay in Ethiopia and Sudan between September and November, the exact locations of these sites have not yet been identified. The locations are often inaccessible due to political instability and roughness of the landscape. As an alternative way of identifying this important site, recently developed stable isotope techniques can be used. The method is non-invasive and does not require the control of birds in the staging area. Thus, I undertook a preliminary analysis to evaluate the potential use of stable nitrogen, carbon and hydrogen isotope ratios in feathers of three migratory species. Results supported the use of stable isotope methods for tracking staging areas. Thus, during my Post-doctoral studies, I expanded the study into nine species, for three consecutive calendar years. Results further confirm the high importance of the northeast Africa for migratory species. Data shows that birds visit a similar habitat in successive years and depend on homogenous food items. The species do not form a single mixed group, but segregate into different moulting habitats. Results suggest that each bird species moult in a geographically restricted area and habitat type. This might have conservation implications at a staging area. Such migratory birds have less flexibility in their habitat choice that they might negatively respond to environmental alteration. This is a particular threat for water-dependent migrants that winter on drought affected sub-Saharan Africa. In my dissertation it is shown that the timing of migration in northeast Africa is synchronized with the alternation of dry and rainy seasons. Recently, the eastern section of Africa has been subject to drastically reduced and unpredictable patterns of rainfall, exacerbated by increased human exploitation. The effect of this unusually erratic rainfall pattern on migratory species has barely been investigated. The stop over sites remains to be identified. This task is of high importance both for understanding the ecology and conservation of migratory birds. Because stopover locations, such as the region in northeast Africa support large numbers of migratory species for about 3 months during their autumn migration, by identifying the exact location of this key area, procedures can be set for conservation priorities. As a next step, collection of data that enables the construction of regional isotope maps of feathers for migratory and local resident birds from African grounds is underway. The dissertation enhances

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knowledge on the conservation of migratory species by giving a comprehensive picture of migration patterns at a larger scale. As part of their engagement to different conventions on Biological Diversity, many African countries are establishing national biodiversity plan. This requires basic scientific data that can identify hotspots for conservation procedures for each country. Such basic but very important scientific studies are neglected in East Africa. To my knowledge, no other study has undertaken such a large-scale study that covered several passerine species, seasons and regions along the Eastern Africa flyway. These findings provide the one of the first evidences for studies of stopover habitat using stable isotope techniques in Africa.

**Publications:** Stable isotope analyses of feathers help identify autumn stopover sites of three long-distance migrants in northeastern Africa. Elizabeth Yohannes, Keith A. Hobson, David J. Pearson and Leonard I. Wassenaar. JOURNAL OF AVIAN BIOLOGY 36:000-000, 2005 (in press)



**Kaatz, Michael****E-Mail Address:** michael.kaatz@freenet.de**Phone Number:** +49 (0)162 / 4094005**Fax Number:** +**Institution:** Förderverein Storchhof Loburg e.V.**Street:** Chausseestrasse 18**City:** D -39279 Loburg**Country:** Germany**Title:**

The migration of the Eastern European White Stork *Ciconia ciconia* over Middle East to Africa

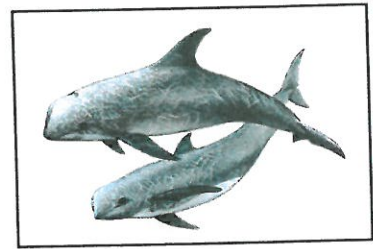
**Original Title:**

Der Zug des Weißstorchs *Ciconia ciconia* auf der europäischen Ostroute über den Nahen Osten nach Afrika

**Subject / Field of Research:** Migration of the Eastern European White Stork**Date of Graduation:** 19.01.2004**Educational Institute / University:** Martin-Luther-Universität Halle-Wittenberg**Supervisor(s):** Prof. Dr. habil. Wolfgang Merbach**Short Statement:**

Satellite telemetry gives new insights into migration of White Storks Analysis of tracking data from a large-scale satellite telemetry project – still a relatively new technology for research on White Storks – was carried out in great detail. The data base comprised 104 migration journeys of 66 tagged White Storks (southeastern migration route). The data extend over 11 years and hence cover one of the longest tracking time spans ever recorded. For the first time, it was possible to accompany the storks and detect different danger points during migration. The analysis of the satellite data showed and quantified the mortality rate, which is highest during migration. Loss rate in young storks is about 79 % during this period. The research shows that in many stopover sites conditions are mainly unfavourable or are deteriorating progressively from north to south; this is associated with substantial losses. There is a lack of undisturbed and safe sites with bodies of water and sufficient food resources, especially in the bottleneck areas between Turkey and Egypt. The research provides a basis for international efforts towards conservation, focussed on particular areas along the migration route of storks travelling southeast. This research has met with broad interest – not only among ornithologists but also in the conservation sciences. The development association “Förderverein Storchenhof Loburg e.V.” has already sold a thousand copies of the published work.

**Publications:** order at: Förderverein Storchenhof Loburg e.V., Chausseestr.18, D-39279 Loburg,  
mail to: foerderverein@storchenhof-loburg.de

**Kaschner, Kristin****E-Mail Address:** kaschner@zoology.ubc.ca**Phone Number:** +49 178 5477760**Institution:** Forschungs- und Technologiezentrum Westküste**Street:** Hafentörn 1**City:** 25761 Büsum**Country:** Germany**Title:**

Modelling and Mapping Resource Overlap between Marine Mammals and Fisheries on a Global Scale

**Subject / Field of Research:** Fisheries science & ecology**Date of Graduation:** 24/11/2004**Educational Institute / University:** Fisheries Centre, University of British Columbia, Vancouver, Canada**Supervisor(s):** Dr. Daniel Pauly & Dr. Andrew Trites**Short Statement:**

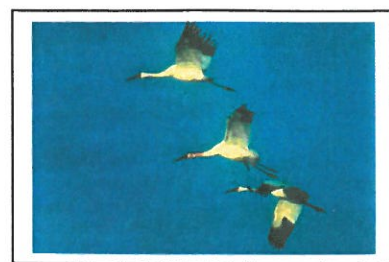
Knowledge about the geographic occurrence of species is a crucial pre-requisite for the effectiveness and implementation of any conservation measure. Many marine mammal species undertake long annual or semi-annual migrations between warmer breeding/molting and colder feeding grounds. Such extensive migrations often result in very large overall ranges, which can be difficult to survey adequately. In addition, many of these species, particularly cetaceans, are relatively rare and difficult to observe at sea. All of this contributes to a dearth of information about areas in the marine environment that may be of particular importance for a given species at specific times of the year. The environmental envelope model that I developed during my PhD represents a new objective approach that allows for the visualization of reproducible and testable hypotheses of large-scale marine species distributions (which were successfully validated for broad range of marine mammal species). The model provides relatively detailed information about heterogeneous occurrences of species throughout their ranges, and thus highlights important habitat. Using the generated predictions, I investigated possible impacts of human activity on marine ecosystems, namely competition for food resources between marine mammals and fisheries, and my findings emphasized the importance of spatial considerations when studying such issues. Additional possible applications of the developed approach include the mapping of critical habitat, primary migratory pathways, and hotspots of marine mammal biodiversity. This may, in turn, greatly help focus research efforts on smaller scales and can, for instance, facilitate the efficient design of marine protected areas for some of the many species with vulnerable conservation status covered under the CMS Agreement. Although outputs currently generated by the model represent annual average distributions, seasonality will be incorporated in the near future, thus allowing for a more detailed investigation of the importance of particular areas for migrating species during specific periods of the annual life cycle.

**Online Publication:** <http://www.fisheries.ubc.ca/students/former.php>**Publications:** Kaschner, K. (2004). Modelling and mapping resource overlap between marine mammals and fisheries on a global scale. Ph.D. thesis, Department of Zoology, University of British Columbia, Vancouver, Canada, 225 pp; Kaschner, K., Stergiou, K. I., Weingartner



**Rana, Gargi**

**E-Mail Address:** gargi\_rana@yahoo.com  
**Phone Number:** 91-5644-229591  
**Institution:** Bombay Natural History Society  
**Street:** New Civil Lines 69-B  
**City:** 321001 Bharatpur, Rajasthan  
**Country:** India

**Title:**

General Ecology of Siberian cranes *Grus leucogeranus* released in Keoladeo National Park , Bharatpur, India

**Subject / Field of Research:** Field Ornithology

**Date of Graduation:** 21/09/02

**Educational Institute / University:** Mumbai University

**Supervisor(s):** Dr. Vibhu Prakash

**Short Statement:**

The Siberian crane *Grus leucogeranus* is one of the most endangered species of cranes in the world. It is a migratory species, breeding in the palearctic and wintering in the tropics. Based on the location of their breeding grounds, three populations are recognized. The central population, which breeds in the Ob river in the Kunowat river basin in Russia and winters in the Keoladeo National Park, India is on the verge of extinction. In a last ditch attempt to augment, the central population of the critically endangered Siberian cranes, four captive bred cranes were released in the Keoladeo National Park, India (1996-1999) with the hope that they will migrate with the migrant visitors. The study was considered important in understanding and evaluating the potential for augmenting wild population by the release of captive bred birds. The study was based on the premise that released birds would survive in the wild only if they have a similar resource utilization pattern like that of their wild conspecifics. The hypothesis was that, the similarity in the resource utilisation pattern of the released and the wild cranes, would induce the released cranes to group with the wild birds and would aid them in adapting more quickly to the conditions in the wild and ultimately following them up to the breeding grounds. The experiment evidences that the released cranes adapted well in the wild with a similarity in the resource utilization pattern to their wild conspecifics. The released cranes probably did not migrate during the spring because of disturbance just prior to departure of wild birds. Two of the released birds died and two left the park and are presumed to be dead. It is possible, that they would have migrated during the next winter as they had fully adapted to the wild conditions and the experiment should be given few more chances.

**Rodríguez, Carlos**

**E-Mail Address:** carlos\_r@ebd.csic.es  
**Phone Number:** +34 954232340  
**Fax Number:** +34 954621125  
**Institution:** Estación Biológica de Doñana  
**Street:** Avda María Luisa s/n  
**City:** E-41013 Sevilla  
**Country:** Spain

**Title:**

Environmental factors related to the breeding success of the lesser kestrel. Climate change and Agriculture intensification

**Original Title:**

Factores ambientales relacionados con el éxito reproductivo del Cernícalo Primilla. Cambio climático e intensificación agraria

**Subject / Field of Research:** conservation biology/environmental ecology

**Date of Graduation:** 02/04/04

**Educational Institute / University:** University of Salamanca

**Supervisor(s):** Javier Bustamante

**Short Statement:**

Climate change and land-use change are among the most important drivers of biodiversity loss in terrestrial ecosystems. Being my PhD focused on the effect of these two factors on the breeding success of a migratory species (the lesser kestrel), I sincerely feel that it closely match the criteria of applying for this Award. The species experienced a marked decline in its Western Palearctic breeding range in the middle of the 20th century, and currently is included in Annex I of the EU's directive on the conservation of wild birds, and in the Appendix II of the Bonn Convention. We focused our work on the breeding success of the species because it was, among the most influencing factors in the population dynamics of the species, the most susceptible to be improved. We found new and very interesting relationships between weather conditions and different measures of lesser kestrel breeding success, being able to conclude that the effect of climate change on breeding success cannot be held responsible for the historical population decline. We also investigate how agricultural intensification played an important role on the population decline of the species. We investigated recent changes in land uses (from 1988 to 2000) and their relationship with the breeding success recorded in different colonies during this period. To be able to accurately assess the mechanism working behind this relationship, we estimated prey densities in different crop types, being able to identify the increase of margins as one of the keystone for lesser kestrel recovery. These results together with published investigations constituted the basis for an individual-based simulation model that was able to quantify the ecological benefit of different land use measures on the light of their predicted effect on lesser kestrel breeding success. Results of this model could be used in designing future agri-environmental schemes.

**Publications:** The effect of weather on lesser kestrel breeding success: can climate change explain historical population declines? /Rodríguez, C & Bustamante, J. 2003. Journal of Animal Ecology 72: 793-810



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**Scheiffarth, Gregor****E-Mail Address:** gregor.scheiffarth@ifv.terramare.de**Phone Number:** +49 4421 9689 41**Fax Number:** +49 4421 9689 55**Institution:** Institut für Vogelforschung**Street:** An der Vogelwarte 21**City:** 26386 Wilhelmshaven**Country:** Germany**Title:**

Born to fly – Migratory strategies and stopover ecology in the European Wadden Sea of a long-distance migrant, the Bar-tailed Godwit (*Limosa lapponica*)

**Subject / Field of Research:** ecology**Date of Graduation:** 25/04/2003**Educational Institute / University:** University of Oldenburg**Supervisor(s):** Franz Bairlein, Karsten Reise**Short Statement:**

For the protection of migratory birds we need the connection between theoretical models and field studies. In the case of this thesis it was shown for the first time that two different migration strategies within the framework of the optimal migration theory are realized within the same species. Both studied populations of the Bar-tailed Godwit (*Limosa lapponica*) use the European Wadden Sea as a stopover site on their annual long-distance migrations between wintering and breeding grounds. However, demands to a stopover site differed markedly due to the different migration strategies. The example of the Bar-tailed Godwit showed clearly the importance to study ecology of species on a population level if we aim to protect key habitats along migratory routes.

**Online Publication:** <http://docserver.bis.uni-oldenburg.de/publikationen/dissertation/2004/schbor03/schbor03.html>

**Publications:** Scheiffarth, G. (2001), The diet of Bar-tailed Godwits *Limosa lapponica* in the Wadden Sea: combining visual observations and faeces analysis. *Ardea* 89, 481-494; Scheiffarth, G. (2001), Bar-tailed Godwits (*Limosa lapponica*) in the Sylt-Rømø wadden Sea

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**Protocol of the first Thesis-Award-Meeting, Bonn Germany July 27, 2005****Participants of the meeting:**

Dr. Marie-Christine Van Klaveren, ACCOBAMS, Monaco; Dr. Pierre Devillers, IRSNB Scientific Council CMS; Dr. Christoph Schenck, Director Frankfurt Zoological Society; Klaus Liedtke, National Geographic Deutschland; Dr. Klaus Riede, GROMS; Prof. Dr. Wolfgang Wägele, Director ZFMK; Robert Hepworth, Executive Secretary of CMS; Dr. Francisco Rilla Manta, CMS Secretariat; Dr. Renate van den Elzen, ZFMK; Dr. Eugeniusz Nowak, Former CMS Scientific Councilor; Dr. Borja Heredia, Ministry for Environment of Spain; Dr. Chedley Raïs, Independent Consultant of Tunisia; Muriel Mannert, CMS Secretariat (protocol); Niranka Dabare, CMS Secretariat (protocol)

Prof. Dr. Wolfgang Wägele welcomed the jury at the Zoologisches Forschungsmuseum Koenig (ZFMK). He gave a short introduction of the jury members and a brief note on the difficulties and importance of the selection process.

The Executive Secretary of CMS Robert Hepworth gave a short introduction on the Thesis Award and the role of the Convention, the importance of the sponsors Lufthansa and National Geographic Deutschland as well as "Friends of CMS". He thanked ZFMK for the friendly welcome and especially Dr. Klaus Riede for realizing the whole event.

Dr. Klaus Riede accord a short briefing by about the rules and criteria for the decision-making. He thanked all reviewers for their support and delivery of clear statements. Dissertations should be useful to the CMS conservation goals. An additional criterion is that the dissertations should be submitted as hardcopies. In case of multi- authorships, the candidate's contribution should be clearly recognizable. During the introduction of the Top 8 the jury made the decision to mention all candidates with the term "CMS Laureate" as a recognition. The sponsors were satisfied with the decision of the Jury.

Robert Hepworth reported on the next steps regarding the winner of the Thesis-Award. The winner will be introduced and honored during the COP8 in Nairobi, Kenya (20 November 2005). In this context "Friends of CMS" will be launched.

CMS is pleased that the donors fully endorse the work of CMS and its objectives now being promoted by the Award that they confirmed their support for the future. The sponsors also promised to further publicize the Award and the work of CMS whenever possible.

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## Acknowledgment

We would like to thank National Geographic Deutschland and Deutsche Lufthansa AG for funding the UNEP/CMS Thesis Award.

We thank all participants of the Thesis Award who helped with their numerous applications to make a go of the First UNEP/CMS Thesis Award.

Also, we would like to thank Dr. Klaus Riede Riede (GROMS, Bonn <http://www.groms.de>) for coordinating the operation of the Thesis Award. He organized the online application, the online database, coordination of the reviewers and the meeting of the final jury in July 2005 in the Forschungsmuseum Koenig, Bonn/Germany.

We also want to thank the Forschungsmuseum Koenig, Bonn/Germany (<http://www.museumkoenig.de>) for the support during the meeting of the Final Jury on 27<sup>th</sup> July 2005.

Our special thanks go to all reviewers, who all wholeheartedly agree to participate in verify all received applications: Dr. Gerhard C. Boere, Petra Deimer, Dr. Pierre Devillers, Dr. Renate van den Elzen, Robert Hepworth, Dr. Borja Heredia, Dr. Jonathan Houghton, Dr. Marie-Christine Van Klaveren, Dr. Eugeniusz Nowak, Dr. Bill Perrin, Dr. Gustav Peters, Dr. Chedly Raïs, Dr. Klaus Riede, Dr. Francisco Rilla Manta, Prof. Dr. Roberto Schlatter, Prof. Dr. Karl-Ludwig Schuchmann, Dr. Andre Weller, and Prof. Dr. Wolfgang Wägele.