

Wildfowl Special Issue: Editorial

Europe has a long tradition of duck research, with many major scientific papers published in the first part of the 20th century still being relevant to studies today. Thanks to the vision of the early pioneers, duck ringing has also been a major activity since the 1950s, leading to increased knowledge of duck flyway delineations and, more generally, of bird migration and population dynamics. Yet despite this long history of interest, for many years studies in the breeding and the wintering grounds were conducted separately, and in some cases were limited to a country or more localised scale. Given the migratory nature of most European duck species, the lack of coordination between research projects in different parts of their flyways has been a major limitation on population studies, and international collaboration has long been called for. It is striking that there have been no formal regular meetings organised specifically for duck scientists to discuss their research since the early European meetings on wildfowl conservation convened by IWRB (now Wetlands International) and the UK's Nature Conservancy Council back in the 1960s.

Most European duck scientists therefore warmly welcomed the organisation of the First Pan-European Duck Symposium (PEDS1) by the research team at the National Environmental Research Institute (NERI) in Aarhus, Denmark, in 2006. The friendly atmosphere combined with high quality science at this symposium was appreciated by the participants, and it was suggested that such congresses should be organised more often. The Second Pan-European Duck Symposium (PEDS2) therefore was held in Camargue, southern France, in March 2009 and it is hoped that scientists undertaking research into European duck species will continue to meet at regular 3-year intervals. A total of 137 participants from 20 countries attended PEDS2, including scientists from several European countries, Zimbabwe, Australia, the USA and Canada. A total of 108 presentations were given as talks or posters at the meeting. A number of these presentations are presented as papers in this volume; those already published elsewhere are listed at the end of the journal. Among the "hot topics" identified as priorities for future research and monitoring are: 1) development of flyway-scale, pan-European management plans for duck populations, 2) better ring return rates to improve population dynamics modelling, 3) improved understanding of the consequences of massive duck stocking programmes (*i.e.* Mallard releases) carried out in some countries, and 4) assessment of the role of ducks as vectors of plant and invertebrate propagules, as well as vectors of diseases.

PEDS2 and publication of the proceedings would not have been possible without the major contribution made by the French Hunting and Wildlife Agency (ONCFS) in organising the meeting and the support of the sponsors whose letters are given in the first few pages of this journal. The Scientific Committee of Alain Caizergues, Hervé Fritz, Andy Green, Michel Gauthier-Clerc, Matthieu Guillemain, Richard Hearn, Pierre Migot, Jean-Yves Mondain-Monval, Hannu Pöysä, David Rodrigues and Vincent Schricke provided invaluable assistance in developing the scientific programme and in reviewing the papers. Additional reviews were

kindly provided by Céline Arzel, David Boertmann, Thomas Bregnballe, Anne-Laure Brochet, Olivier Devineau, Tony Fox, Carol Fouque, Thomas Galewski, Gunnar Gunnarsson, John Harradine, Pierre Legagneux, Carl Mitchell, Leif Nilsson and Veli-Matti Väänänen. We are most grateful to all concerned for an enjoyable and informative symposium and for the new insight into duck populations published in these proceedings.

A number of students attended the symposium and gave high quality presentations. It is hoped that the involvement of the next generation of researchers will ensure that international collaboration continues to improve in the coming years. The Third Pan-European Duck Symposium is scheduled to be held in the Czech Republic in 2012. This will provide an opportunity to assess the extent to which international collaborative research programmes have developed by then.

Matthieu Guillemain & Eileen Rees

The Second Pan-European Duck Symposium was organised by:



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The French Hunting and Wildlife Agency (ONCFS) is a state organisation under the double authority of the Ministry of Ecology and the Ministry of Agriculture. It aims to improve scientific knowledge about wildlife species and their habitats. It is also responsible for enforcing hunting and environmental laws, and provides technical support to policy makers and land managers.

ONCFS has a long tradition of undertaking monitoring and research for a range of duck species, covering dabbling ducks, diving ducks and seaducks as well as their habitats. A number of ONCFS researchers and technicians work full time on these species in various parts of France. The country is important as the wintering area, migration stopover area and/or breeding range for many European duck populations.

France also has a long history of duck hunting, with a significant population of dedicated wildfowlers. The annual duck hunting bags in the country are among the largest in Europe, which means that the French hunters and hunting organisations, including ONCFS, have a major responsibility for studying, managing and conserving these species and their wetland habitats. France therefore plays a very active role in developing and implementing international conventions such as the Agreement on the Conservation of African-Eurasian Migratory Waterbirds and also the Ramsar Convention.

For all of these reasons, ONCFS enthusiastically accepted during the First Pan-European Duck Symposium in Denmark, in March 2006, to organise the second of these meetings in France, and to co-edit the present proceedings. ONCFS has previously organised the “Anatidae 2000” congress in Strasbourg, in 1994, which similarly brought together a large number of scientists involved in studying wildfowl populations. We have long been in favour of international scientific collaboration at the flyway scale, and hope that this symposium will have provided a major step forward in this domain. We are therefore very happy to present these proceedings. I use this opportunity to thank the many sponsors and other supporters who have helped in preparing the event and in publishing this volume.

Jean-Pierre Poly

**Directeur Général
Office National de la Chasse
et de la Faune Sauvage**



With its strategic geographical position between the northern and eastern European countries and the African continent and its numerous wetlands, France has a crucial role to play in the conservation and management of many migratory waterbird populations and their habitats. Throughout their migration, the birds get food, breed, winter and are hunted on French land.

Given the challenges of this unique situation, the Ministry of Ecology, Energy, Sustainable Development, Town and The Sea (MEEDDM) wished to join its partners in the National Hunting and Wildlife Agency (ONCFS) in organising the 2nd Pan-European Duck Symposium held in Arles (France) in March 2009, which was attended by about 150 experts from 25 countries. With their work, these experts take forward research and improve scientific knowledge on the biology, behaviour and population trends of these species.

Among its range of responsibilities, the MEEDDM is in charge of regulating waterfowl hunting in France, and as such is particularly aware of the importance of developing knowledge on these species at the international level. Knowledge is the starting point of successful management and conservation policy for these species and their habitats. In the current global context of climate change and spread of diseases such as avian influenza, knowledge of different species serves to enlighten and support political decisions.

The MEEDDM was pleased that this international symposium took place in France. It is another illustration of French commitment to fulfilling its international obligations for the implementation of international conventions such as the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) and the Ramsar Convention.

Migratory birds, like science, know no borders. For our ducks moving throughout the western palearctic region, and sometimes beyond, international cooperation is therefore essential. This needed cooperation has been retained as one of the working axes of the agreement signed in July 2008 between hunter representatives and nature conservation NGO (non-governmental organisation) representatives. Moreover, European Community policies go beyond the European territory, with the EU Bird Directive taking account of the importance of bird nesting and wintering areas outside of the EU. Additionally, ducks are important not only in themselves but as indicators of the status of wetland habitats. As such they illustrate the challenges of biodiversity conservation.

The MEEDDM expresses the wish that the contacts made and the work carried out during the symposium result in the development of new international research programmes. It is hoped that it will serve to support existing or currently developing programmes such as the new “African Initiative” on capacity building for the implementation of the AEWA.

Paul Delduc

Deputy Director

Sous-Direction de la Protection et de la Valorisation des espèces et de leurs milieux

Direction de la Nature et de la Biodiversité

MEEDDM



For a long time underestimated or considered as unhealthy areas, wetlands are in reality areas of substantial ecological, social and economic value. These important natural resources have received serious damage over the course of the 20th century.

It is therefore important that this exceptional heritage be preserved and managed, and to ensure that any exploitation is sustainable.

Being aware of the intrinsic value of wetland habitats in its territory, the Conseil Général of the Bouches-du-Rhône for many years had an active policy of land acquisition in natural areas. Thus more than 4,000 hectares of wetlands in Camargue and in Crau became the property of the Department.

Nowadays, these protected and cared-for spaces offer exceptional feeding and resting habitats for numerous species of waterbirds during the winter months.

Convinced by the particular fragility of the wetland ecosystems, the Conseil Général of the Bouches-du-Rhône will continue to protect these important spaces and undertakes to maintain their prominence in the region.

Jean-Noël Guérini

**Sénateur
Président du Conseil Général
des Bouches-du-Rhône**



Because of its position within the Rhône delta, Arles is of major importance for waterbirds, at the European scale and beyond. The choice of our city to host the Second Pan-European Duck Symposium therefore seemed to be particularly appropriate.

The Camargue is a major site for avian migrations in this part of the world, especially for wildfowl. It is a vital stopover for wild birds travelling across continents, ultimately from Africa to Asia, sometimes facing adverse conditions such as cold spells, poor habitat quality and hunting. Hunting remains a major point, even though it is increasingly managed to allow sustainable populations over the long term. Hunting obviously is associated with uptakes within the populations, but management procedures associated with hunting also allow these birds finding appropriate habitats – notably in Camargue – to meet their food requirements during the wintering period.

The variety and the quality of the presentations made at the symposium highlights the importance of wildfowl ecology for researchers. Indeed, the symposium was attended by a number of highly renowned authors. Here in Camargue, the pioneering work of researchers such as Alain Tamisier and his colleagues, some of which is still at the forefront of wetland research, has provided valuable insight into the functioning of this major wintering area. How the area and its bird populations will change over the coming decades is of great interest, not least because of the historical importance of wildfowl as game species in the region. Wildfowling is a traditional activity in the Camargue. Water management practices associated with hunting make the area more attractive to the wintering birds, but this can also cause ecological perturbation to the water system itself. Despite being illegal, providing bait to draw in the ducks is also practised and may affect the movements of wildfowl at dusk and dawn.

Generally speaking, human activities affect bird populations. Great care should be taken to ensure that human impacts on these populations are minimal by developing appropriate management programmes and seeking to ensure that development is sustainable. Such development will allow the environment to play its full role because it will be appropriately respected.

Alain Dervieux

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au Développement Durable et à l'Agenda 21
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Ducks constitute a key group for the conservation of wetlands. Millions of ducks from the West Palaearctic region winter in the Mediterranean wetlands, which thus constitute one of their critical ecosystems. Ducks are also very important for Mediterranean wetlands: they play a key role in the dynamics of the ecosystems, mediating dispersal between isolated populations of plants and invertebrates, because they are important consumers of wetlands products (such as aquatic plants, seeds and invertebrates) during the winter months. Beyond this ecological role, ducks are a strong motivating force for the local population, through the availability of game, management of protected areas and the conservation of wetlands around the Mediterranean basin. Ducks are important social and economic drivers as hunted game. Wetland management for hunting, or in protected areas for conservation, is largely dependent on wintering duck objectives, and this has consequences for global biodiversity.

The conservation and wise use of Mediterranean wetlands is the main objective for the Tour du Valat, and ducks have been of particular interest considering the important role and dynamic that they create. In the early years of the institution (1950s and 1960s), duck ringing was a dominant winter activity. These data have been very useful for understanding the ducks' movements and the need for appropriate management and conservation of wetlands on a large scale. Ducks were a key group for the development of international agreements for the conservation of wetlands such as the Ramsar Convention. Today, the Tour du Valat maintains a strong interest in this group and has several projects related to the monitoring of populations and the analysis of their role in the dispersal of organisms including diaspores and diseases. Given the trans-boundary limits and migration patterns, the future of ducks and more generally of wetlands must be found in international cooperation. We believe that the symposium and publication of its proceedings has been an opportunity for enhancing international research on ducks and will be fruitful in terms of conservation.

Jean-Paul Taris

Président de la Tour du Valat