PREFACE

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PREFACE

All articles in this issue of WILDLIFE BIOLOGY have a common protagonist, the Eurasian lynx *Lynx lynx*. Contrary to the articles in the supplementary issues on grouse (Vol. 13, Suppl. 1) and wolverine (Vol. 13, Suppl. 2), the articles in this issue were submitted independently as ordinary articles to WILDLIFE BIOLOGY, and so are not products of a symposium or a conference. However, Jon E. Swenson, as the Editor-in-Chief of WILDLIFE BIOLOGY up to March 2006, agreed with the suggestions put forward by Urs Breitenmoser and John D.C. Linnell to bring together the large number of manuscripts on lynx submitted to WILDLIFE BIOLOGY during 2004-2005, and to publish them in a special issue - the present issue of WILDLIFE BIOLOGY.

The lynx has one of the widest distributions of a cat species, from the Atlantic coast of Europe to the Pacific coast in the Far East, and from the edges of the Arctic tundra to the south slopes of the Himalayas. Although, the overall distribution area in Asia probably has not changed significantly over the past centuries, the situation is very different in Europe, where the species has been on the edge of regional extinction through a combination of habitat loss, depletion of its prey, and intensive persecution. Due to eradication during the 18th and 19th centuries, the distribution reached its minimum early in the 20th century. No more than 650-700 lynx survived in Europe west of Russia at the beginning of World War II. Now, this area hosts $>$ 8,000 lynx. This dramatic change over 50 years was the result of legal protection of the species in northern and eastern Europe, allowing the recovery of the surviving autochthonous populations there, the reintroduction of lynx into western and central Europe, and a spectacular increase in roe deer *Capreolus capreolus*, the lynx's main prey.

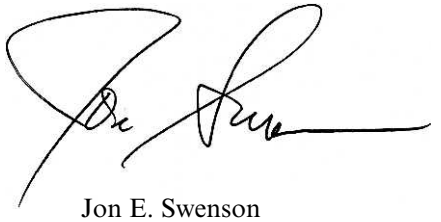
The recovery of this predator and its prey has accompanied the growth of the human population, the mechanisation of agriculture and forestry, an increasing fragmentation of landscapes by transportation infrastructure, increases in recreation, and, in many parts of Europe, a return to extensive sheep husbandry. This demonstrates that lynx can easily live in a human-dominated world and can tolerate a good deal of what we often call 'disturbance'. The recovery of lynx and its integration into the modern cultivated landscapes of Europe is both an ecologically interesting phenomenon and a management challenge. When modern wildlife research commenced in Europe some 40 years ago, many scientists and wildlife managers regarded large carnivores as a 'luxury of nature', with a very limited importance to the ecosystem. Research work during the past 20 years has led to a revision of this opinion, as confirmed by several papers in this issue of WILDLIFE BIOLOGY. Today, we know that large carnivores, such as lynx, have important ecological and ethical values and a considerable socio-economical significance. They cause conflicts, and are hence 'political animals', because society has made nature conservation, including the preservation of large carnivores, a legal obligation, but without restricting the anthropogenic use of land. To mitigate conflicts through management, we need to understand lynx population biology and the determinants of these conflicts. Basic questions remain to be answered, e.g. "How many lynx are there?" and "What are the population trends?". Three articles in this issue of WILDLIFE BIOLOGY (Capt 2007, Linnell et al. 2007a,b) present methods on how to monitor lynx populations. However, trends in population sizes cannot be interpreted without a reference to spatial scales (Breitenmoser-Würsten et al. 2007a, Okarma et al. 2007), and without insight into demographic processes which both Breitenmoser-Würsten et al. (2007b) and Boutros et al. (2007) describe. Such information is crucial when defining management measures, which include the removal of lynx from a population through harvest or control measures. Such interventions are often used to

mitigate conflicts, because lynx are predators. Understanding predation is hence a central aspect of lynx management and conservation. Three articles (Andersen et al. 2007, Helldin & Danielson 2007, Molinari-Jobin et al. 2007) investigate lynx predation and its relation to hunting by man. For the long-term maintenance of lynx populations in human-dominated landscapes, we must see their conservation in a wider context, including the historical and socio-cultural environments (Breitenmoser et al. 2007), and we need to assess the potential range and carrying capacity, as done by Zimmermann et al. (2007) and Doswald et al. (2007).

The articles compiled in this issue of WILDLIFE BIOLOGY present lynx biology and ecology from different landscapes across Europe, from the Jura Mountains on the border between Switzerland and France, which is an ecological island in a densely populated landscape, to the forests of Scandinavia and Poland, traditional strongholds for large carnivores. The Jura population was reintroduced, whereas the Scandinavian and the Carpathian populations are autochthonous, but have gone through severe bottlenecks. The comparison of findings from study areas with different landscapes and habitat features, and socio-economic and cultural conditions, allows the exploration of the ecological flexibility of the species. One general shortcoming of wildlife research is that most of our studies are too short or too local to separate the 'typical' from the 'specific'. Even though some of the studies summarised in this issue lasted for a long time, like the 10-year project in the Jura Mountains, these studies are still too short to completely understand the dynamics of lynx populations and their ecological environment. We will get the 'full picture' only through comparison of many studies from different places and under diverse ecological conditions.

While Europe has a relatively small share of the total range of Eurasian lynx, most of the research using robust scientific methodology has been conducted here. This is, of course, a consequence of the global distribution of economic and scientific resources, but is also a result of the broad public interest in wildlife issues and of the sheer necessity to 'do something' regarding the conservation of the species and the mitigation of the conflicts triggered by its recovery. We hope that the approaches and findings summarised in this issue of WILDLIFE BIOLOGY will be important beyond lynx and beyond Europe. On one hand, many regions and countries in Asia are presently undergoing a rapid development similar to that which occurred in Europe during the 19th and 20th centuries, and this will likely negatively affect lynx populations if they are not properly managed and conserved. On the other hand, reintegration and maintenance of viable large carnivore and large herbivore populations in human dominated landscapes is, and will be, an important topic in nature conservation across the world as more true wilderness is lost. Our results offer hope. The success of the lynx testifies to the ability of large carnivores to survive in the 21st century if we understand them well enough and make allowances for their needs. We hope that this issue of WILDLIFE BIOLOGY will contribute to more successes in the conservation and management of lynx and other large carnivores.

Anne Loison
Editor-in-Chief



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ANNOUNCEMENT

The 2nd Pan-European Duck Symposium will be held in Arles, France, in March 2009

The French National Game and Wildlife Agency (Office National de la Chasse et de la Faune Sauvage) is pleased to announce the 2nd Pan-European Duck Symposium (PEDS2), which will be held in Arles, Camargue (Southern France), during 23-26 March 2009. To follow up upon the successful first symposium held in Fuglsøcentret in Denmark in March 2006, two full days of scientific communications, plenary talks by leading speakers and an evening poster session are scheduled. All aspects of dabbling-, diving- and seaduck ecology will be considered. Scientists from non-European countries are also invited to participate. Session themes and deadlines will be announced later, but people who are interested in receiving regular news updates about the symposium are welcome to join our mailing list already now. People willing to organise workshops are most welcome to sign on already now.

The congress will be held in the friendly atmosphere of a holiday resort (MAEVA-Camargue; see http://www.maeva-camargue.com), providing both congress facilities and accommodation for participants. After the congress, a one-day trip to the Camargue (the most important wetland area in France), the Alpilles (with a typical Provencal scenery of Mediterranean hills with olive tree plantations) or the Crau (the only steppe ecosystem in France) will be arranged.

Arles is easily accessible by train from Paris (Arles or Avignon TGV station), and a shuttle picking up participants arriving in the Marseille-Marignane international airport will be organised.

Please contact us using this e-mail address: matthieu.guillemain@oncfs.gouv.fr if you need further information or want to join our mailing list. A congress web site, which will be updated regularly, has been created at:
http://www.oncfs.gouv.fr/evenements/duckssymposium.php.