

ECHA proposal under REACH Regulations¹

Restriction proposal on the use of lead gunshot in or over wetlands

Dear Madam or Sir,

We the undersigned European and other concerned scientists with expertise in the toxic effects of lead ammunition on human, wildlife or domestic animal health are writing to you as a follow up to the European Scientists' Open Letter of October 2018. In this, the European Commission's initiative, undertaken by the European Chemicals Agency (ECHA), to produce their [restriction proposal on the use of lead gunshot in or over wetlands](#) was applauded, and the [opinion](#) that the use of lead gunshot for shooting in or over wetlands requires restriction, as proposed by ECHA and adopted by its scientific committees, was strongly supported.

Collectively, we:

1. Acknowledge, but are concerned, that a positive decision on the proposal to restrict lead gunshot use in and over wetlands has been subject to repeated delays over the last 2 years, for a variety of reasons that do not necessarily relate to the evidence base.
2. Are concerned that misinformation about the issue and about the suitability of alternatives to lead gunshot continues to circulate.

We therefore continue, in the strongest terms, to:

3. Urge the Member States at the REACH Committee and the European Council as well as MEPs at the European Parliament to support this important restriction proposal which harmonises restrictions across all wetlands in Europe.

Subsequent to the original Open Letter a considerable body of additional evidence has accumulated that supports and reinforces the urgent need for further measures to restrict the use of all lead ammunition for shooting. Examples include papers in the dedicated special issue of the peer-reviewed journal *Ambio* '[Lead in Hunting Ammunition: Persistent Problems and Solutions](#)'. These highlight the human and wildlife impacts of continued use of lead ammunition, their economic cost to society, and the wide range of suitable alternatives available. Concerns regarding the exposure of children and other vulnerable groups to lead from ammunition in game meat have resulted in moves by some shooting and [retail](#) organisations, and governmental agencies, away from the use of lead ammunition in Europe and elsewhere. For example, California State in the USA banned the use of all lead ammunition [from 1st July 2019](#). The need for primary prevention measures to reduce low-level childhood exposure to lead from all sources was recently highlighted by [Unicef and Pure Earth](#).

¹ REACH is a European Union regulation concerning the Registration, Evaluation, Authorisation & restriction of Chemicals. ECHA is the European Chemicals Agency.

We therefore:

4. Applaud the [European Commission's request to ECHA](#) to prepare a restriction proposal on the placing on the market and use of lead in ammunition (gunshot and bullets) and of lead in fishing tackle conforming to the requirements of Annex XV in REACH.
5. Urge the European Commission and Member States at the REACH Committee, European Council and Parliament to support such further restrictions on the use of lead ammunition across the EU.

This open letter is being produced as a [freely available document](#). As scientists and health professionals working in various relevant disciplines our motivation is to promote appropriate use of the large body of evidence available in support of health-protective initiatives for people, wildlife and the environment.

We, the undersigned scientists, are a group of 75 professionals from 18 countries, 13 of which are in Europe

Yours faithfully,

Dr Oddgeir Andersen PhD

Research Scientist, Norwegian Institute for Nature Research – NINA, Fakkelgården, NO-2624 Lillehammer, Norway

Professor Jon M. Arnemo PhD

Inland Norway University of Applied Sciences, NO-2418 Elverum, Norway, and Swedish University of Agricultural Sciences, SE-901 83 Umeå, Sweden

Professor David C. Bellinger PhD MSc

Neurology and Environmental Health, Harvard Medical School, Harvard School of Public Health Boston, MA 02115 USA

Dr Aksel Bernhoft PhD

Senior Scientist, Veterinarian/Toxicologist, Feed Safety Expert, Norwegian Veterinary Institute, PO Box 750 Sentrum, NO-0106 Oslo, Norway

Associate Professor Łukasz J. Binkowski PhD

Institute of Biology, Pedagogical University of Krakow, 30-084 Kraków, Podchorążych 2, Poland

Professor Alan R. Boobis OBE PhD FBTS FBPhS

Imperial College London, Ducane Road, London W12 0NN, UK

Professor Asa Bradman PhD MS

Professor of Public Health, Department of Public Health, University of California, Merced, USA

Associate Professor Scott Michael Brainerd PhD

Inland Norway University of Applied Sciences, Faculty of Applied Ecology, Agricultural Sciences and Biotechnology, Anne Evenstadsvegen 80, NO-2480 Koppang, Norway

Professor Eric Buenz PhD MBA MAgr

Research Professor of Applied Industries, Nelson Marlborough Institute of Technology (NMIT), Te Whare Wananga o Te Tau Ihu o Te Waka a Maui, 322 Hardy St, Private Bag 19, Nelson 7042, New Zealand

Dr Ruth Cromie PhD

Research Fellow, Wildfowl & Wetlands Trust (WWT), Slimbridge, Glos GL2 7BT, UK

Professor José Antonio Donázar

Research Professor, Department of Conservation Biology, Estación Biológica de Doñana CSIC; Avenida de Americo Vesputio s/n, Isla de la Cartuja, E-41092 Sevilla, Spain

Associate Professor Frauke Ecke

Senior Lecturer, Department of Wildlife, Fish, and Environmental Studies, Swedish University of Agricultural Sciences, Sweden

Professor Alan Emond

Emeritus Professor of Child Health, Bristol Medical School, University of Bristol, 1-5 Whiteladies Road, Clifton, Bristol BS8 1NU, UK

Associate Professor Ane Eriksen PhD

Inland Norway University of Applied Sciences, Faculty of Applied Ecology, Agricultural Sciences and Biotechnology Campus, Evenstad N-2480 Koppang, Norway

Associate Professor Alina L Evans DVM MPH PhD

Inland Norway University of Applied Sciences, Anne Evenstadsvei 80, 2480 Koppang, Norway

Professor Jerzy Falandysz

University of Gdańsk, Gdańsk, Poland

Professor Miguel Ferrer

Research Professor, Spanish Council for Scientific Research (CSIC), Avd. María Luisa, pabellón del Perú, Sevilla 41013, Spain

Adjunct Associate Professor Myra Finkelstein PhD

Microbiology and Environmental Toxicology Department, University of California Santa Cruz, 1156 High St., Santa Cruz, CA 95064, USA

Professor A. D. Fox

Professor of Waterbird Ecology, Department of Bioscience, Aarhus University, Kalø, Grenåvej 14, DK-8410 Rønne, Denmark

Dr Michael Fry PhD

Research Physiologist Emeritus, Department of Animal Sciences, University of California, Davis, and Chief Scientist Emeritus, American Bird Conservancy, Washington DC, USA

Professor Philippe Grandjean MD

Professor of Environmental Medicine, University of Southern Denmark, Odense, Denmark

Professor Andy Green

Research Professor, Estación Biológica de Doñana, Spanish Council for Scientific Research (CSIC), Spain

Professor Rhys E. Green

Department of Zoology, University of Cambridge, Downing Street, Cambridge, CB2 3EJ, UK

Professor Joan O. Grimalt

Research Professor, Spanish Council for Scientific Research (CSIC). Barcelona, Spain

Professor Raimon Guitart

Toxicology Unit, Facultat de Veterinària – Universitat Autònoma de Barcelona (UAB), E-08193 Bellaterra, Spain

Dr Björn Helander PhD

retired Senior Scientist, Environmental Research & Monitoring, Swedish Museum of Natural History, Box 50007, SE-104 05 Stockholm, Sweden

Professor Fernando Hiraldo

Research Profesor ad honorem, Doñana Biological Station, C.S.I.C, Spain

Professor Howard Hu MD MPH ScD

Professor & Flora L. Thornton Chair, Department of Preventive Medicine, Keck School of Medicine of USC, University of Southern California, Soto Street Building, Suite 330A, 2001 N Soto Street, MC 9239, Los Angeles, CA 90089-9239, USA

Dr Helle Bernstorff Hydeskov MSc DVM MVetMed DipECZM (Wildlife Population Health) MRCVS

EBVS® European Veterinary Specialist in Wildlife Population Health

School of Animal, Rural and Environmental Sciences, Nottingham Trent University, Brackenhurst Campus, Southwell, NG25 0QF, UK.

Dr David E Jacobs PhD

Director, US Collaborating Center for Healthy Housing Training and Research with the World Health Organization/Pan American Health Organization, 10320 Little Patuxent Pkwy, Suite 500, Columbia, MD 21044, USA

Jean Jalbert

Director General, Tour du Valat, Institut de recherche pour la conservation des zones humides méditerranéennes, Le Sambuc, 13 200 Arles, France

Professor Lukas Jenni PhD

Scientific Director, Swiss Ornithological Institute, Seerose 1, CH-6204 Sempach, Switzerland

Professor Christine Kreuder Johnson VMD PhD

Professor of Epidemiology and Ecosystem Health, Director, EpiCenter for Disease Dynamics, One Health Institute, School of Veterinary Medicine, University of California, Davis, California 95616 USA

Adjunct Associate Professor Niels Kanstrup

Department of Bioscience, Aarhus University, Kalø, Grenåvej 14, DK-8410 Rønne, Denmark

Dr Terra Kelly DVM PhD Dipl ACZM

Wildlife Epidemiologist, Senior Scientist, One Health Institute, University of California- Davis, 1089 Veterinary Medicine Dr., Davis, CA 95616 USA

Associate Professor Ignacy Kitowski DSc PhD

State School of Higher Education in Chełm, PL 22- 100 Chełm, Pocztowa 54 Str. Poland

Dr Helle Katrine Knutsen

Senior Scientist, Department of Environment and Health, Norwegian Institute of Public Health, P.O. Box 222 Skøyen, N-0213 Oslo, Norway

Associate Clinical Professor Michael J. Kosnett MD MPH, FACMT

Division of Clinical Pharmacology & Toxicology, Department of Medicine, University of Colorado School of Medicine, and Department of Environmental and Occupational Health, Colorado School of Public Health, USA

Dr. med. vet. Oliver Krone

Veterinary specialist for Zoo-, Enclosure- and Wild Animals, Veterinary specialist for Parasitology, Eurasian Director Raptor Research Foundation, Assistant Editor Journal of Wildlife Research, Head of the parasitological and toxicological labs, Department of Wildlife Diseases Leibniz Institute for Zoo and Wildlife Research, Alfred-Kowalke-Str. 17, 10315 Berlin, Germany

Professor Bruce P. Lanphear MD MPH

Professor, Simon Fraser University, Vancouver, British Columbia, Canada

Dr Maja Lazarus PhD

Senior Research Associate, Analytical Toxicology and Mineral Metabolism Unit, Institute for Medical Research and Occupational Health, Ksaverska cesta 2, P.O. Box 291, HR-10001 Zagreb, Croatia

Professor Jesper Madsen DSc

Chairman of the Waterbird Harvest Specialist Group of Wetlands International, Aarhus University, Department of Bioscience, Kalø, Grenåvej 14, DK-8410 Rønne, Denmark

Dr Knut Madslien DVM PhD/senior researcher, Head of Wildlife Health/OIE National Focal Point on Wildlife in Norway, Norwegian Veterinary Institute, PO Box 750 Sentrum, NO-0106 Oslo, Norway

Professor Dr Emma Martínez López

Area of Toxicology, Dpt. of Sociosanitary Sciences, University of Murcia, Campus de Espinardo, 30100 Murcia, Spain

Professor Rafael Mateo Soria DVM PhD

Group of Wildlife Toxicology, Instituto de Investigación en Recursos Cinegéticos (IREC) - Institute for Game and Wildlife Research, CSIC-UCLM-JCCM, Ronda de Toledo 12, 13005 Ciudad Real, Spain

Assistant Professor Patricia Mateo Tomás PhD

Research Unit for Biodiversity (UMIB, UO-CSIC-PA), Oviedo University, Spain

Professor Andrew A. Meharg FRSE MRIA

School of Biological Sciences, University Road, Belfast BT7 1NN, UK

Dr Howard W. Mielke PhD

Department of Pharmacology, Tulane University School of Medicine, New Orleans, Louisiana, USA

Professor Stein R. Moe

Norwegian University of Life Sciences, Faculty of Environmental Sciences and Natural Resource Management, P.O. Box 5003, NO-1432 Aas, Norway

Dr Paola Movalli

Pharmacist, PhD Food & Environmental Toxicology, Ecotoxicologist, Research Group Prof Erik Smets, Naturalis Biodiversity Center, Darwinweg 2, 2300 CR Leiden, The Netherlands

Dr Julia Newth PhD

Ecosystem Health & Social Dimensions Manager, Wildfowl & Wetlands Trust (WWT) Slimbridge, Glos GL2 7BT, UK

Professor Ian Newton DSc OBE FRS FRSE

Emeritus Fellow, NERC Centre for Ecology & Hydrology, Benson Lane, Crowmarsh Gifford, Wallingford OX10 8BB, UK

Professor Dan Osborn

Chair of Human Ecology, Co-Chair UCL Environment Domain, Editor-in-Chief UCL Open: Environment, Department of Earth Sciences, University College London, Gower Street, London WC1E 6BT, UK

Professor Deborah Pain DPhil

Honorary Research Fellow, Department of Zoology, University of Cambridge, Downing Street, Cambridge, CB2 3EJ, UK

Professor Christopher M. Perrins LVO FRS

Leverhulme Emeritus Fellow, Edward Grey Institute for Field Ornithology, Department of Zoology, University of Oxford, South Parks Road, Oxford OX1 3PS, UK

Dr Nikolai Petkov

Bulgarian Society for the Protection of Birds, PO Box 50, BG-1111 Sofia, Bulgaria

Associate Professor Emeritus Mark A. Pokras DVM

Wildlife Clinic & Center for Conservation Medicine, Tufts University, Cummings School of Veterinary Medicine, N. Grafton, MA, 01536, USA

Dr Robert H. Poppenga DVM PhD DABVT

Head, Toxicology Section, California Animal Health and Food Safety Laboratory, School of Veterinary Medicine, University of California, Davis, CA 95616, USA

Amanda Reddy MS

Executive Director, US National Center for Healthy Housing, 10320 Little Patuxent Pkwy, Suite 500, Columbia MD, 21044, USA

Professor Patrick T. Redig DVM PhD

Professor of Avian Medicine and Surgery Emeritus, Founder and Director of The Raptor Center Emeritus, College of Veterinary Medicine, University of Minnesota, St. Paul, MN 55018, USA

Dr Anthony W Sainsbury

Senior Research Fellow, Institute of Zoology, Zoological Society of London, London NW1 4RY, UK

Professor Emeritus Hans Martin Seip

Dept. of Chemistry, University of Oslo, Postboks 1033 Blindern, 0315 Oslo, Norway

Professor Donald Smith PhD

Microbiology and Environmental Toxicology Department, University of California, Santa Cruz, CA 95064, USA

Professor Christian Sonne Veterinary Ecotoxicology and Wildlife Health DVM PhD dr.med.vet., Dipl. ECZM-EBVS (Wildlife Health)

Aarhus University, Faculty of Technical Sciences, Department of Bioscience, Arctic Research Centre (ARC), Danish Centre for Environment and Energy (DCE), Frederiksborgvej 399, POBox 358, DK-4000 Roskilde, Denmark

Professor Chris J Spray MBE FRSA PhD MCIEEM

Senior Research Fellow and Emeritus Professor of water science and policy, UNESCO Centre for Water Law, Policy & Science, University of Dundee, Dundee DD1 4HN, UK

Dr Sigbjørn Stokke

Researcher, Norwegian Institute for Nature Research, Postboks 5685 Torgarden, 7485 Trondheim, Norway

Dr Brian Stollery

School of Psychological Science, Faculty of Life Sciences, University of Bristol, 12a Priory Road, Bristol BS8 1TU, UK

Dr Mark Taggart

Senior Research Fellow, Group Leader: Environmental Contamination and Ecological Health, Environmental Research Institute, University of the Highlands and Islands, Castle St, Thurso, KW14 7JD, UK

Dr Caroline Taylor

Research Fellow, Centre for Academic Child Health, Bristol Medical School, University of Bristol, 1-5 Whiteladies Road, Clifton, Bristol BS8 1NU, UK

Dr Marcela Uhart DVM

Director Latin America Program, One Health Institute, School of Veterinary Medicine, University of California, Davis, Member, OIE Working Group on Wildlife, South America Coordinator, IUCN Wildlife Health Specialist Group, Los Alerces 3376, Puerto Madryn Chubut (9120), Argentina

Dr Antonio Uzal

Senior Lecturer in Wildlife Conservation, Nottingham Trent University, School of Animal, Rural and Environmental Sciences, Nottingham Trent University, Brackenhurst Campus, Southwell, NG25 0QF, UK

Linda van den Heever

Vulture Project Manager, BirdLife South Africa, Wakkerstroom, 2480, South Africa

Dr Turid Vikøren DVM PhD

Senior researcher wildlife health, Norwegian Veterinary Institute, PO Box 750 Sentrum, NO-0106 Oslo, Norway

Dr Stefano Volponi

Istituto Superiore Protezione e Ricerca Ambientale (ISPRA), Area CFN - Pareri tecnici e strategie di conservazione via Ca' Fornacetta 9 - 40064 OZZANO EMILIA, Bologna, Italy

Professor Barbara Zimmermann

Inland Norway University of Applied Sciences, Norway