

Canid Biology and Conservation

An International Conference

Programme

* Lead authors will present papers unless indicated otherwise

SWIFT, KIT & ARCTIC FOX SYMPOSIUM

Mon 17 September
Theatre A

Moderators: Anders Angerbjorn & Pall Hersteinsson

13:30 – 13:40

Introduction

13:40 – 14:00

Swift fox, *Vulpes velox*, Re-introduction in Canada and the USA

Clio Smeeton & Ken Weagle

14:00 – 14:20

The Pribilof Fox – An Insular Canid Facing an Uncertain Future

Paula White (Presented by Pall Hersteinsson)

14:20 – 14:40

Swift Fox Vocalisations: Their Possible Application to Population censuses

Safi Darden

14:40 – 15:00

Search Dogs and DNA Analyses of Scat: A Non-Invasive Approach for Monitoring Endangered San Joaquin Kit Foxes

Deborah Anne Smith

15:00 – 15:20

Home Range and Spatial Organization of Arctic Foxes – Responses to Spatio-temporal Distribution of Prey

Nina E. Eide

15:20 – 15:45

Tea

15:45 – 17:30

Short Presentations and Discussion of Management Programmes

- **Arctic Fox in Sweden and Finland**
Anders Angerbjorn
- **Arctic Fox in Iceland**
Pall Hersteinsson
- **Swift Fox Reintroduction in Canada**
Lu Carbyn
- **San Joaquin Kit Fox**
Brian Cypher
- **Captive Breeding of Swift Fox in Canada**
Clio Smeeton
- **Captive Breeding of Arctic Fox in Norway**
John Linnell

Suggested Issues for Discussion:

- Captive breeding
- Reintroduction
- Translocation
- Predator control
- Feeding
- Genetics

BEHAVIOURAL ECOLOGY

Tues 18 September
Theatre A

Moderator: Luigi Boitani

09:00 - 09:05

Welcome message

09:05 - 09:40

PLENARY: The Ecology and Behaviour of Canid Society

David Macdonald, Scott Creel & Gus Mills

09:40 - 10:05

Greeting Behaviour in African Wild Dogs: Putting Behaviour Back into Behavioural Ecology

James Malcolm

10:05 - 10:30

Intraguild Competition Between Arctic and Red Foxes

Bodil Elmhagen, Magnus Tannerfeldt & Anders Angerbjorn

10:30 - 10:55

Wolf population ecology in Russian Karelia and Finland: effects of prey availability and exploitation by humans

Ilpo Kojola & Pjotr. Danilov

10:55 - 11:15

Coffee

11:15 - 11:40

Male-Biased Sex Ratio in African Wild Dogs

J. Weldon McNutt

11:40 - 12:05

Ecology of the Endangered Darwin's Fox (*Pseudalopex fulvipes*) in a Fragmented Forest in Southern Chile

Jaime Jimenez & Jaime Rau

12:05 - 12:30

Comparative Ecology and Conservation Priorities of Swift and Kit Foxes

Axel Moehrensclager, Brian Cypher, Kathy Ralls, Rurik List & M. Sovada

12:30 - 14:00

Lunch

DISEASE AND EPIDEMIOLOGY

Tues 18 September
Theatre A

Moderator: Arun Venkataraman

14:00 - 14:35

PLENARY: Canid Diseases and Conservation

Rosie Woodroffe, Karen Laurenson & Marc Artois

14:35 - 15:00

Targeting Disease Control Programmes for Endangered Canids: Cost-Effectiveness of Alternative Strategies for Ethiopian Wolves

Karen Laurenson, Daniel Haydon & EWCP

15:00 - 15:25

Development of a Bait, and Baiting System, for the Delivery of Oral Rabies Vaccine to African Wild Dogs (*Lycaon pictus*)

Darryn Knobel

15:25 - 15:50

The Significance of Canids in the Epidemiology of Human Leishmaniasis

Orin Courtenay

CANID SYSTEMATICS, PALAEOANTHROPOLOGY AND PHYLOGEOGRAPHY

Tues 18 September
Theatre A

Moderator: James Malcolm

16:15 - 16:50

PLENARY: Evolution and Systematics of Canids

Blaire van Valkenburgh

16:50 - 17:15

The Earliest Canids in Africa

Lars Werdelin & Margaret Lewis

17:15 - 17:40

Aspects of Canid Systematics Revealed Through Supertree Analysis

Olaf Bininda-Emonds

17:40 - 18:05

Using Ancient DNA Techniques to Address Questions in Canid Systematics

Jennifer Leonard, Carles Vila & Robert Wayne

18:05 - 18:30

Consequences Of Demographic Bottlenecks and Genetic Drift on Population and Phylogeographic Structure of Fragmented Wolf Populations in West Eurasia

Stephan Funk, Vittorio Lucchini & Ettore Randi

POPULATION DYNAMICS AND MODELLING

Tues 18 September
Theatre B

Moderator: Gus Mills

14:35 - 15:00

The Implications of the Allee Effect for the Conservation of Painted Hunting Dogs

Franck Courchamp & Greg Rasmussen

15:00 - 15:25

Source-sink Dynamics Induced by Hunting of Culpeos to Reduce Sheep Predation in Patagonia

Andres Novaro & Martín Funes

15:25 - 15:50

Hunting, Migration and Sinks/sources Among Northern Canadian Wolf Populations

Marco Musiani, Cormack Gates, Paul Paquet, Dean Cluff, Lyle Walton, Paul Wilson & Bradley White

15:50 – 16:15

Tea

16:50 - 17:15

Feeding Success of African Wild Dogs in Relation to Group Size and Kleptoparasitism: The Emergence of an Allee Effect?

Chris Carbone, Lory Frame, George Frame, James Malcolm, John Fanshawe, Clare FitzGibbon, George Schaller, Iain Gordon, Marcus Rowcliffe & Johan du Toit

17:15 - 17:40

Density Dependence in the Icelandic Arctic Fox Population

Pall Hersteinsson

17:40 - 18:05

Modelling Territorial Animal Populations With Social Structure

William Pitt, Frederick Knowlton & Paul Box

CONFLICT & CONTROL

Wed 19 September
Theatre A

Moderator: Weldon McNutt

09:00 - 09:35

PLENARY: Management and Control of Wild Canids Near People

Claudio Sillero-Zubiri & Jonathan Reynolds

09:35 - 10:00

Red Fox and Grouse Populations in Finland: Is the Fox Threatening Grouse Populations?

Kaarina Kauhala

10:00 - 10:25

Coyote Predation on Domestic Sheep as a Model System to Investigate Positive and Negative Indirect Effects Between Prey

Ben Sacks

10:25 - 10:50

Golden Jackals in Intensively Cultivated Areas of Bangladesh: Daring Dacoits or Rat Control Wallahs

Michael Jaeger, Parvin Sultana & Emdadul Haque

10:50 - 11:15

Coffee

11:15 - 11:40

Red Fox Population Management in Britain

Jonathan Reynolds

11:40 - 12:05

Wolves and Livestock: Problem Packs and Vulnerable Farms

Adrian Treves, Adrian Wydeven & Lisa Naughton-Treves

12:05 - 12:30

Aversive and Disruptive Stimuli for Managing Wolf Predation

John Shivik, Stewart Breck, Rick Williamson, Val Asher, Kyran Kunkle, Mike Phillips & Ed Bangs

12:30 - 14:00

Lunch

POPULATION GENETICS

Wed 19 September
Theatre A

Moderator: Eli Geffen

14:00 - 14:35

PLENARY: Genetics of Canids

Robert Wayne

14:35 - 15:00

Detecting Coyote Introgression into the Wild Red Wolf Population

Jennifer Adams, Lisette Waits, Craig Miller, William Waddell & Arthur Beyer (Presented by Lisette Waits or Craig Miller)

15:00 - 15:25

Topographic Barriers to Gene Flow in Wolves (*Canis lupus*) of the Canadian Northwest

Lindsey Carmichael, John Nagy, Nic Larter & Curtis Strobeck

15:25 - 15:50

Hybridization and Conservation Genetics of Scandinavian Wolves

Carles Vila, Anna-Karin Sundqvist & Hans Ellegren

CONSERVATION POLICY AND PLANNING

Wed 19 September
Theatre A

Moderator: Karen Laurenson

16:15 - 16:50

PLENARY: Science and Politics of Wolf Management in Europe

Luigi Boitani

16:50 - 17:15

Conservation of Wild Dogs in South Africa: Problems with Establishing a Metapopulation

Gus Mills

17:15 - 17:40

North American Canid Taxon Advisory Group Regional Collection Plan

Jack Grisham & Karen Bauman*

17:40 - 18:05

Gray Wolf Restoration in the North-western United States

Edward Bangs, John Shivik*, et al.

REPRODUCTIVE ECOLOGY

Wed 19 September
Theatre B

Moderator: Rurik List

14:35 - 15:00

Reproductive Tactics in Golden Jackals (*Canis aureus*): a Model Incorporating Kinship, Behavioural Conflict, and Ecological Constraints

Patricia Moehlman & Heribert Hofer

15:00 - 15:25

Evidence for Induced Ovulation in the Channel Island Grey Fox, *Urocyon littoralis*

Joan Bauman, Cheryl Asa & Tim Coonan

15:25 - 15:50

Characteristics of Oestrous Cycles and Inter-oestrous Intervals in Fennec Foxes (*Vulpes zerda*)

Carolina Valdespino & Cheri Asa

15:50 - 16:15

Tea

POPULATION GENETICS (continued)

Wed 19 September
Theatre B

16:50 - 17:15

The Use of Molecular Tools in Management Procedures of Existing Canid Captive Breeding Programmes

Samantha Bremner, Paulo Prodöhl & Robert Elwood

17:15 - 17:40

Is the Endangered Fennoscandian Arctic Fox Population Genetically Isolated?

Love Dalen, Magnus Tannerfeldt, Anders Angerbjörn & Anders Götherström

17:40 - 18:05

Genetic Characterization of Himalayan Wolf, an Endangered Canid from India, Using DNA Markers

Ramesh Aggarwal, J. Ramadevi & Lalji Singh

CONSERVATION TOOLS AND PRACTICE

Thu 20 September
Theatre A

Moderator: Rosie Woodroffe

09:00 - 09:35

PLENARY: Reintroduction, Translocation, Population Management and Captive Breeding of Canids

Cheryl Asa, Axel Moehrenschrager & Luigi Boitani

09:35 - 10:00

Golden Eagles, Island Foxes and Feral Pigs: How Exotic Species Turn Native Predators into Prey

Gary Roemer, Josh Donlan & Franck Courchamp

10:00 - 10:25

Managing the Wolf (*Canis lupus*) Expansion in Western Europe: Conservation and Control Strategies

Guillaume Chapron, Stéphane Legendre, Jean Clobert, Régis Ferrière & Robert G. Haight

10:25 - 10:50

Activities and Successes: the Ethiopian Wolf Conservation Programme

Stuart Williams

10:50 - 11:15

Coffee

11:15 - 11:40

Current Conservation Efforts for San Joaquin Kit Foxes

Brian Cypher, Patrick Kelly & Daniel Williams

11:40 - 12:05

Use of Hoo Calls as a Tool in African Wild Dog Conservation

Bob Robbins & Kim McCreery

12:05 - 12:30

The Relationships between Humans and Wolves in the Montesinho Natural Park (North-east of Portugal): From Destruction to Conservation

João Pedro Galhano Alves

POPULATION ECOLOGY

Thu 20 September
Theatre B

Moderator: Andres Novaro

09:35 - 10:00

Effects of Removing Breeding Coyotes on Coyote Spatial Organization

Karen Blejwas, Dale McCullough & Michael Jaeger
(Presented by Mike Jaeger or Brian Mitchell)

10:00 - 10:25

The Role of Predation by Wolves (*Canis lupus pallipes*) and Jackals (*Canis aureus*) on Blackbuck (*Antelope cervicapra*) in Velavadar National Park, India

Yadvendradev Jhala

10:25 - 10:50

Spatial and Temporal Patterns of Resource Utilization by Culpeo Foxes in Central Chile

Valeria Salvatori, Luigi Boitani, Andrea Campanella, Gaia Vaglio-Laurin & Peter Meserve

10:50 - 11:15

Coffee

11:15 - 11:40

Why Are Dholes So Abundant in the Nilgiri Foothills, Southern India?

Arun Venkataraman & Narendra Babu

11:40 - 12:05

Gray Fox Distribution in Southern California: Effects of Carnivore Competitors and Suburbanization

Todd Fuller, Raymond Sauvajot, Veronica Farias, Jose Fedriani, Seth Riley, Eric York, Denise Kamradt & Robert Wayne

12:05 - 12:30

Poster Viewing

UPDATES FROM THE FIELD

Thu 20 September
Theatre A

Moderator: James Malcolm

14:00 - 14:20

Bush Dogs (*Speothos venaticus*) in Eastern Paraguay: a Preliminary Analysis of Diet and Habitat Associations

Gerald Zuercher (Presented by Matt Swarner)

14:20 - 14:40

Ecological Niche of the Pampas Fox (*Pseudalopex gymnocercus*) in a Mountain Grassland of Argentina

Mauro Lucherini, Diego Birochio & Vidal Estela Luengos

14:40 – 15:00

Demographic Structure of the Latvian Wolf Population (Based on the Investigation of Hunted Individuals)

Zanete Andersone

15:00 – 15:20

Developing a Technique for Attracting Bush Dogs (*Speothos venaticus*) in the Wild

Karen E. DeMatteo, Osvaldo Carrillo, Gerald L. Zuercher, Kelli Smith & Ingrid Porton

15:20 – 15:40

Wolf Monitoring, Research and Management on the Scandinavian Peninsula

Petter Wabakken, Håkan Sand, Olof Liberg, Hans Christian Pedersen & Åke Aronson

15:40 – 16:15

Tea

CANID RED LIST VALIDATION (W)

Thu 20 September
Theatre A

Moderator: Claudio Sillero & Luigi Boitani

Aim: Evaluate Red List for the Canidae

16:15 – 16:35

Special Talk: Species Information System

Luigi Boitani

16:35 – 17:00

Red List Criteria and RAMAS Software

17:00 - 17:30

Species-by species Assessments

CANID TAXONOMY (W)

Thu 20 September
Theatre B

Moderators: Bob Wayne & Blaire van Valkenburgh

14:00 – 15:45 & 16:15 - 17:30

Aim: Determine CSG position on systematic status of several canid species

Topics:

- Splitting of *Nyctereutes procyonoides*
- *Pseudalopex fulvipes* status
- *Vulpes velox* & *V. macrotis* separate status
- Dingo/New Guinea Singing Dog a distinct taxon? Or *C. lupus* subspecies?
- *Pseudalopex (Lycalopex)* superspecies

Special Talk: Is "Tanuki" a Separate Species?

Midori Saeki & *Kaarina Kauhala

CONSERVATION PRIORITIES (W)

Thu 20 September
Seminar Room D38 (C4)

Moderators: David Macdonald & Working Group Coordinators

14:00 - 15:45 & 16:15 - 17:30

Aim: Determine CSG priorities for the 'Canid Action Plan for the 21st century'

Topics:

- How to measure conservation success
- Determine which species merit specific action plans
- Projects and actions involving all species:
 - Canid Database
 - Status Surveys
 - Protocols and Priorities
 - Education & Public Relations
- Role of Regional Sections and Working Groups in Action Implementation

SPECIES ACTION PLANS (W)

Fri 21 September
Theatre B & C4 (D38)

Moderators: Gus Mills, Rosie Woodroffe & Species Working Group Coordinators

09:30 – 12:30 & 14:00 – 15:30

Aim: Formulate action plans for all threatened canid species for the 'Canid Action Plan for the 21st Century'

[The workshop moderators may choose to divide in groups to discuss each threatened species separately]

Topics:

Projects and actions for African wild dog Projects and actions for Ethiopian wolf

Projects and actions for dhole

Projects and actions for bush dog

Projects and actions for Island gray fox

CANID RED LIST VALIDATION (W) (continued)

Fri 21 September
Seminar Room D38

Moderators: Claudio Sillero & Luigi Boitani

09:30 - 10:45

Species-by Species Assessments

10:45 - 11:15

Coffee

CSG MEMBERSHIP ISSUES (W)

Fri 21 September
Seminar Room C4

Moderators: Claudio Sillero and Regional Section Chairs

11:15 – 12:30 & 14:00 – 15:30

Aim: Discuss CSG operation and other businesses

Topics:

- Effectiveness of current structure
- Need for a CSG Project Officer
- Status of current CSG Officers
- CSG Website
- Canids-L
- Adoption of New Logo
- Election of an Editorial Board for the *Canid News Online*

15:30 – 16:00

Tea

WORKSHOP REPORTS & DEBATE

Fri 21 September
Theatre B

Moderator: David Macdonald

16:00 – 16:40

Workshop Reports

16:40 – 17:30

Debate

17:30

Closing Remarks