**PHYSIOLOGY**

**POSTERS 1 – 17 TIKAHNTU FOYER**

**ASIATIC BLACK BEAR**

Cardiorespiratory Dose-response Relationship of Isoflurane in Asiatic Black Bear (Ursus thibetanus) During Spontaneous Ventilation  
*Author: Dong-Hyuk Jeong*

Serum Chemistry Values of Re-introduced Asiatic Black Bears (Ursus thibetanus ussuricus) in South Korea  
*Author: Dong-Hyuk Jeong*

**BLACK BEAR**

Postnatal Cub Development in American Black Bears  
*Author: Colleen Olfenbuttel*

Determinants of in Utero and Postnatal Reproductive Success, and the Possibility of Cryptic Female Choice in American Black Bears, Ursus americanus  
*Author: Mark Teshera*

**BROWN BEAR/GRIZZLY BEAR**

Bile Acids during Dormancy in Brown Bears  
*Author: Fabrice Bertile*

Lipid Composition of Free-Ranging Hibernating Brown Bears  
*Author: Isabelle Cherry*

Endogenous Lipoprotein Metabolism in Free-Ranging Hibernating Brown Bears  
*Author: Chantal Simon*

Metabolism of Eicosanoids in Free-Ranging Hibernating Brown Bears  
*Author: Alina Evans*

Physiological Stress among Grizzly Bears across a Multi-Use Landscape  
*Author: Diana Lafferty*

Health and Reproductive Status of the Brown Bear Population in Croatia  
*Author: Slaven Relji*

Oomics Characterization of Muscle Responses to Inactivity in Brown Bears during Dormancy  
*Author: Georg Tascher*

Analysis of Fecal Glucocorticoid (FGM) Concentrations in Captive Brown Bears (Ursus arctos)  
*Author: Alyssa Tews*

The Seasonal Change of Sebaceous Glands in the Back Skin of Male Adult Brown Bear (Ursus arctos): The Possibility of Regulation by Testosterone  
*Author: Jumpei Tomiyasu*

**Trans Fatty Acids in Subcutaneous Adipose Tissue in Brown Bears in Croatia**  
*Author: Lana Vrankovic*

Erythrocytes Antioxidant Protection and Fatty Acid Composition in Brown Bears in Croatia  
*Author: Lana Vrankovic*

Spondylodiscitis in Brown Bear (Ursus arctos)? A Case Report  
*Author: Tomasz Zwijacz*

Airborne Fungi in the Cave Frequently Used as a Den by Brown Bear- Preliminary Study  
*Author: Tomasz Zwijacz*
Bears of the World: Learning from our Past to Inform our Future

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TECHNIQUES
POSTERS 18 – 26 TIKAHTNU FOYER

ASIATIC BLACK BEAR
The Period of Annuli Formation and Relationship between Annuli Width and Aging in Asiatic Black Bears
Author: Yukino Aoki

The Assessment of Culvert-Trap Site Adequacy of Asiatic Black Bear (Ursus thibetanus usuricus)
Author: Gye Seon Kim

BROWN BEAR/GRIZZLY BEAR
Author: Jon M. Arnemo

Designing, Testing and Installing Bear-Resistant Containers in Europe
Author: Michal Haring

Long-Term Studies Beyond Parks and Protected Areas - Advancing Bear Research at Commercial Bear-Viewing Sites (A Case Study of Knight Inlet Lodge)
Author: Owen Nevin

Estimating Grizzly Bear (Ursus arctos) Population Size in Northern Alaska Using Advanced Distance Sampling
Author: Harry Reynolds

A GIS Approach to Identifying Connectivity Potential between Brown Bear (Ursus arctos) Habitat in Greece
Author: Angeliki Savvantoglou*

Specific Features Regarding Brown Bear Immobilization in Romania Using General Anesthetics and Sedatives
Author: George Sirbu

Author: Petter Wabakken

MANAGEMENT
POSTERS 27 – 39 TIKAHTNU FOYER

Better Bear Management Using Spatial Models to Refine Distance Sampling Estimates of Population Size
Author: Earl F. Becker

ASIACTIC BLACK BEAR
Threat Assessment of Asiatic Bears in India
Author: Biba Jasmine*

Conservation Priority Areas of Rare Mammals under the Background of Climate Change Ni Northeastern China
Author: Luana Xiaofeng

BLACK BEAR
Identifying American Black Bear (Ursus americanus) Highway Crossings in Central Georgia, USA
Author: Mike Hooker

BROWN BEAR/GRIZZLY BEAR
Tracking the Brown Bears in Northeastern Turkey
Author: Aysegul Coban

Development of Spatially and Temporally Relevant Habitat Classifications for Barren-Ground Grizzly Bear Research, Conservation, and Management in the Central Canadian Arctic
Author: Rianne Diepstraten*
Bear Use Trends at McNeil River State Game Sanctuary  
Author: Thomas Griffin

Himalayan Brown Bear Predation on Livestock in Pangri Valley, Himachal Pradesh, India  
Author: Bipan Chand Rathore

Crossing Countries and Highways in the Carpathians: The Dispersal Story of Iwo  
Author: Nuria Selva

When Should Maternal Care Terminate? The Importance of Offspring Mass in the Scandinavian Brown Bear  
Author: Joanie Van de Walle*

Since when were Captured Asiatic Black Bears Dependent on Human Food?  
Author: Rumiko Nakashita

How Does Japanese Black Bear Get over Summer Period When Food Resources are Limited?  
Author: Koji Yamazaki

Impact of Wildlife on Seed Survival of Cyclobalanopsis Glauca in Defen, Yushan National Park, Taiwan  
Author: Kuo Yen Jen

BROWN BEAR/GRIZZLY BEAR

Dietary Variation in Interior Alaskan Black and Grizzly Bears Based on Stable Isotopes  
Author: Torsten Bentzen

Diet and Macronutrient Optimization in Wild Ursids: a Comparison of Grizzly Bears with Sympatric and Allopatric Black Bears  
Author: Cecily Costello

Evaluation of the Brown Bear Diet, in Spring-Mid Summer Period in Brasov-Prahovei Valey Region  
Author: Mihai Fedorca

Using Multiple Stable Isotope Systems to Reconstruct the Diets of Yellowstone Grizzly Bears  
Author: John Hopkins

Do Forest Harvest Retention Patches and Edges Enhance Food Resources for Grizzly Bears?  
Author: Terrence Larsen

Annual Effective Dose of Caesium (137Cs, 134Cs) Intake by Bear Meat and Entrails in Croatia  
Author: Gordana Marović
Splitting Hairs: Dietary Ecology of Alaskan Brown Bears and the Utility of Sectional vs. Whole Hair Sampling for Use in Stable Isotope Dietary Mixing Models  
Author: Matthew Rogers

Testing the Compatibility of Laboratory Procedures: Stable Isotopes and Cortisol Analysis in Brown Bear Hair  
Author: Agnieszka Sergiel

POLAR BEAR

Population-Level and Temporal Trends in Polar Bear (Ursus maritimus) Foraging Ecology in Western Hudson Bay  
Author: Amy Johnson

Assessing and Forecasting Starvation Trends in Southern Hudson Bay Polar Bears Using Dynamic Energy Budget Models  
Author: Allison E. Slater

SPECTACLED BEAR

Characterization of the Gut Microbiota of Spectacled Bears (Tremarctos ornatus) from Feces: Insights into their Feeding Ecology  
Author: Andrea Borbon

SUN BEAR

Linking Berry Yields with High Resolution Weather Variables to Identify Potential Future Climate Change Effects on Bear Foods  
Author: Anne Hertel

DISEASE AND PARASITES

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ANDEAN BEAR

Approaching the Andean Bear Alopecia Syndrome: Challenges of Ex-Situ Population Conservation  
Author: Nadine Bechstein

ASIATIC BLACK BEAR

Blood Characteristics and Parasite Detection of Wild Formosan Black Bears (Ursus thibetanus formosanus)  
Author: Ting-Rong Lee

POLAR BEAR

Polar Bears as a Sentinel for Emerging Wildlife Zoonoses: Past and Present Occurrence of Brucella Spp., Coxiella Burnetii, and Toxoplasma Gondii in the Southern Beaufort Sea Population  
Author: Todd Atwood

When Sharing Is Not Caring: An Arctic-Host Parasite Sharing Network  
Author: Sophie Watson
BEHAVIOR
POSTERS 60 – 67 TIKAHNTU A/B

ANDEAN BEAR
Marking Behavior of Andean Bears in an Ecuadorian Cloud Forest: A Pilot Study
Author: Eva Filipczykova

ASIATIC BLACK BEAR
Daily Activity Patterns of Brown Bears and Asiatic Black Bears in the Russian Far East
Author: Iurii Petrunenko
Marking Behavior of Brown Bears and Asiatic Black Bears in the Russian Far East
Author: Ivan Seryodkin

BLACK BEAR
Activity Patterns and Denning Behavior of Black Bears in Big Bend National Park, Texas
Author: Skyler Stevens

BROWN BEAR/GRIZZLY BEAR
Selection of Marking Trees by Brown Bears in Slovakia
Author: Jan Barilla*
The Use of Tri-Axial Accelerometers to Identify Behavior of Bears
Author: Patricia Graf*
Optimizing Dinner Time in a Risky Restaurant: Temporal Segregation of Brown Bears at Concentrated Food Sources
Author: Miha Krofel
Behavioral Patterns of Brown Bears for Intraspecific Communication with Rub Trees
Author: Yoshikazu Sato

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ASIATIC BLACK BEAR
Detection of Fagaceae Areas Based on High-Resolution Remote Sensing Imagery for Asiatic Black Bear Restoration Project
Author: Byung-Seon Kahng

BLACK BEAR
Ecological Niche Modelling Supports Lineage Differentiation for the American Black Bear (Ursus americanus)
Author: Carlos Luna*
Habitat Connectivity for Recolonizing American Black Bears in Mississippi
Author: Mariela Gantchof
Ecology of Black Bears (Ursus americanus) in Urban/Suburban Habitats
Author: Nicholas Gould-Strules
Niche Separation of Sympatric Grizzly and Black Bear
Author: Amy Macleod*
Agent Based Modelling of Black Bear Foraging in Whistler, BC: An Effort in Reducing Human-bear Interactions
Author: Jessa Marley
Black Bears Recolonize Wildlife Corridor between Ocala and Osceola National Forests, Florida, USA
Author: Brian Scheick

BROWN BEAR/GRIZZLY BEAR
An Integrated Approach to Resource Use of Brown Bears in Katmai National Park, Alaska
Author: Joy Erlenbach*
Grizzly Bear Denning Ecology and the Effects of Human Activity in Arctic Alaska  
Author: Richard Shideler

Brown Bear in Ukraine: Ecological Features  
Author: Maryna Shkvyria

Ecology of Brown Bears (Ursus arctos) within a Coastal Region of Katmai National Park Alaska  
Author: Tom Smith

Multi-Scale Attributes of Den Sites, Selection of Den Habitats, and Denning Phenology of Grizzly Bears in North-Central Alaska  
Author: Mathew Sorum

GOBI BEAR

Habitat Modeling of Mazaalai or Gobi Bear (Ursus gobiensis Sokolov Et Orlov 1990) in Mongolia  
Author: Enkhbileg Dulamtseren

POLAR BEAR

The Occurrence of Historical Polar Bear Maternal Denning on a Man-made Feature, North Slope, Alaska  
Author: Craig Perham

SLOTH BEAR

Connectivity between Sloth Bear Populations in the Central Indian Landscape  
Author: Prachi Thatte*

SPECTACLED BEAR

The Spectacled Bear (Tremarctos ornatus) is a Disperser of Seeds in the Cloud Forest of the Southern Andes of the Peru  
Author: Denisse Mateo-Chero

GENETICS

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ANDEAN BEAR

D-Loop Primer Design to Analyze the Genetic Diversity of the Andean Bear from an Ecuadorian Population of Northwestern Quito  
Author: Gabriela Bruque*

BROWN BEAR/GRIZZLY BEAR

Preliminary Results in Testing the Influence of Habituation on Genetic Structure of Brown Bears in Brasov-Prahova Valley Area  
Author: A. Cotovelea

The Methodological Investigation of Brown Bear Individual Identification Based on Genetic Analysis Using Fecal DNA in Hokkaido, Japan  
Author: Mami Kondo

Environmental DNA from Residual Saliva for Efficient Noninvasive Genetic Monitoring of Brown Bears (Ursus arctos)  
Author: Rachel Wheat*

Genetic Status and Structure of Brown Bears in the Bryansk Region (Russia)  
Author: Elena Sitnikova
**DEMOGRAPHY/ABUNDANCE/DENSITY**

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**ASIATIC BLACK BEAR**

The Relative Abundance of Formosan Black Bears in Taiwan National Parks  
*Author: Hsin Chien Tsai*

**BLACK BEAR**

Estimating Population Parameters of the American Black Bear (Ursus americanus) in Central Georgia, USA  
*Author: Annaliese Ashley*

Using Bayesian Iterative Removal and Updating to Assess Pre-Harvest Black Bear Population Abundance in North Carolina  
*Author: Joe Folta*

Spatially Explicit Estimates of Population Abundance and Density of the Florida Black Bear (Ursus americanus floridanus)  
*Author: Jacob Humm*

Demography of Black Bears in Remote Boreal Alaska  
*Author: Joshua Peirce*

Harvest Rates of Black Bears on Prince of Wales Island, Southeast Alaska, 2007-2009  
*Author: Boyd Porter*

**SUN BEAR**

Connecting Data for a Range-wide Assessment of Sun Bears (*Helarctos malayanus*)  
*Author: Lorraine Scotson*

Multiple Datatypes and Integrated Population Models: How to Improve Our Knowledge of Bears and Other Apex Predators Population Dynamics  
*Author: Florent Bled*

Combining Multiple Sources of Information from Evolving Long-Term Monitoring Studies to Estimate Cause-Specific Survival  
*Author: Christophe Bonenfant*

**BROWN BEAR/GRIZZLY BEAR**

*Author: Alexander Kopatz*

Summer Food Availability, Body Condition, and Cub Survival in Female Brown Bears in the Rusha Area, Shiretoko Peninsula, Hokkaido, Japan  
*Author: Michito Shimozuru*

Survival and Productivity of Female Brown Bears on Sitkalidak Island, AK  
*Author: Nathan Svoboda*

Multiple Estimates of Effective Population Size for Monitoring Yellowstone Grizzly Bears  
*Author: Pauline Kamath*
**HUMAN-BEAR CONFLICT**

**POSTERS 102 – 129 SECOND LEVEL FOYER**

**Aversive Conditioning to Keep Bears Wary of Humans**  
*Author: Lori Homstol*

**Mapping Human-Bear Conflicts in Rural & Urbanizing Areas: Creating Toolboxes for Response**  
*Author: Kathryn Mazaika*

**Human Behavior can Trigger Bear Attacks in North America**  
*Author: Vincenzo Penteriani*

**ASIATIC BLACK BEAR**

**Attacks by Asiatic black bears in District Mansehra, Pakistan: 2001-2015**  
*Author: Muhammad Awais*

**BROWN BEAR/GRIZZLY BEAR**

**Patterns and Correlates of Claims and Compensation for Brown Bear Damages at the Continental Scale**  
*Author: Carlos Bautista*

**Fifteen Years of Human-Brown Bear Incidents in the Romanian Carpathians**  
*Author: Silviu Chiriac*

**Physiological Effects of Human Approach and Hunting with Dogs in the Scandinavian Brown Bear (Ursus arctos)**  
*Author: Boris Fuchs*

**Can Managing Natural Attractants Reduce Human-bear Conflicts in Campgrounds?**  
*Author: Scott Gilbert*

**Bears Coping with Croatian Highways**  
*Author: Daniele De Angelis*

**The Influence of Urban Development on the Ecology and Ethology of Brown Bear in Romanian Carpathians**  
*Author: Ramon Jurj*

**New Technologies are Saving Bears at Yosemite National Park**  
*Author: Ryan Leahy*

**Characteristics of Grizzly Bear Sightings from the North Slope Oil Fields**  
*Author: Nils Pedersen*  
*Author: Hanna Kavli Lodberg-Holm*  
*Author: Cyril Milleret*  
*Author: Gro Kvelprud Moen*

**New Technologies are Saving Bears at Yosemite National Park**  
*Author: Ryan Leahy*

**The Spatial Characteristics of Human-Black Bear Conflict Spots - The Case Study of Takayama City and Its Surroundings in Gifu Prefecture**  
*Author: Natsuko Fukuda*

**Impacts of Human Hunting on the Foraging Behavior of Brown Bears in Sweden**  
*Author: Hanna Kavli Lodberg-Holm*

**Do Wolves Avoid Brown Bears? Large Scale Effects of Humans and Bears on Wolf Pair Establishment in Scandinavia**  
*Author: Cyril Milleret*  
*Author: Gro Kvelprud Moen*
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HUMAN DIMENSIONS

POSTERS 130 – 141 SECOND LEVEL FOYER

Supplemental Feeding in Poor Food Years: Effectiveness for Reducing Bear-Caused Damages
Author: Klemen Jerina

The Timeline of a Tumultuous History: 150 Years of Bear Management in Yosemite National Park
Author: Caitlin Lee-Roney

Overcoming Cultural Resistance to Co-existing with Bears
Author: Gillian Sanders

POLAR BEAR

An Evaluation of Human-Polar Bear (Ursus maritimus) Interactions on Alaska’s North Slope
Author: Wesley Larson*

Increasing Oil Spill Response Capabilities for Polar Bears in Alaska
Author: Susanne Miller

Mitigation of Human and Polar Bear Conflicts in the Industrial Areas of the North Slope of Alaska through a Long-term Regulatory Conflict Management Program
Author: Christopher Putnam

SLOTH BEAR

Human Sloth Bear Conflict is Highly Influencing to New Feeding Adaptation in Sloth Bears of Balasore, WI Division, Eastern India
Author: Prakash Mardaraj

BLACK BEAR

Using Lay Observers to Provide Qualitative Behavioral Data on Black Bears to Inform Park Management: the Pros and Cons of Monitoring via an Opportunistic Reporting System
Author: Anne Braaten

ANDEAN BEAR

Andean Bear Conservation Alliance: How well are we doing?
Author: Isaac Goldstein

Andean Bear Conservation as Public Policy of the Metropolitan District Municipality of Quito, Ecuador
Author: Orfa Rodriguez

BROWN BEAR/GRIZZLY BEAR

Making the Most of Citizen Scientists in Brown Bear Studies in Canada’s Rocky Mountain National Parks
Author: Sarah Elmeligi*

Author: Javier Naves

Brown Bear Damages and Identification of Human-bear Conflict Hotspots in Croatia
Author: Dario Hipolito

Defensive Grizzly Bear Attack at a Den Site in Banff National Park
Author: Jon Stuart-Smith

Does Poaching Matter? Illegal Human Caused Mortality of Brown Bear and Wolf in Finland
Author: Johanna Suutarinen*

Utilization of UAV for Brown Bear Damage Detection at Corn Fields in Hokkaido, Japan
Author: Hifumi Tsuruga

POLAR BEAR

An Evaluation of Human-Polar Bear (Ursus maritimus) Interactions on Alaska’s North Slope
Author: Wesley Larson*

Increasing Oil Spill Response Capabilities for Polar Bears in Alaska
Author: Susanne Miller

Mitigation of Human and Polar Bear Conflicts in the Industrial Areas of the North Slope of Alaska through a Long-term Regulatory Conflict Management Program
Author: Christopher Putnam

SLOTH BEAR

Human Sloth Bear Conflict is Highly Influencing to New Feeding Adaptation in Sloth Bears of Balasore, WI Division, Eastern India
Author: Prakash Mardaraj

BLACK BEAR

Using Lay Observers to Provide Qualitative Behavioral Data on Black Bears to Inform Park Management: the Pros and Cons of Monitoring via an Opportunistic Reporting System
Author: Anne Braaten

ANDEAN BEAR

Andean Bear Conservation Alliance: How well are we doing?
Author: Isaac Goldstein

Andean Bear Conservation as Public Policy of the Metropolitan District Municipality of Quito, Ecuador
Author: Orfa Rodriguez

BROWN BEAR/GRIZZLY BEAR

Making the Most of Citizen Scientists in Brown Bear Studies in Canada’s Rocky Mountain National Parks
Author: Sarah Elmeligi*
Residents’ Attitudes and Behaviors toward Brown Bears and Brown Bear Management in Sapporo in 2012 and 2014
Author: Masato Kameda

Explorations of the Natural and Cultural Heritage of Brown Bears
Author: John Kitchin

POLAR BEAR
Inuvialuit and Nanuq: A Polar Bear Traditional Knowledge Study
Author: Patrick Gruben

Using Inuit Knowledge to Understand Polar Bear Ecology
Author: Vicki Sahanatien

SLOTH BEAR
Perception of Local Communities in Conservation of Declining Sloth Bear Population in Central India
Author: Netrapal Singh Chauhan
In mammalian carnivores many dietary fatty acids (FA) are predictably incorporated into a consumer's adipose tissue, since their ability to synthesize FA is limited. In some ecosystems, some FA are only available in a few types of food and can be used as a nutritional marker providing detailed information on animals feeding habits. Trans FA (tFA) may serve as useful biomarkers since they are incorporated into adipose tissue and they cannot be endogenously synthesized by carnivores. Trans FA are present in many commercially prepared food products and also in ruminants' fats. The objective of this study was to evaluate human-bear relations using tFA. The study was conducted on 37 animals (20 M, 17 F). Thirty samples of subcutaneous adipose tissue were collected during the legal hunting season (March-May and September-December 2014) and 7 samples were collected following intervention shooting or after vehicle collision. After thawing, homogenization and lipid extraction, the FA composition was determined by gas chromatography/mass spectrometry. Results showed that lipids isolated from depot adipose tissues of brown bear were dominated by monounsaturated fatty acids (females 47.51±7.34%, males 51.15±12.06%; the most common was oleic acid, cisC18:1). Saturated fatty acids constituted 26.92±14.76% in females and 29.86±12.39% in males; palmitic acid (C16) was found in the highest percentage. Polyunsaturated fatty acids (PUFA) were found in 25.56±12.21% (females) and 18.99±11.45% (males); the most common was linoleic acid (C18:2). Higher percentage of C17:0, C18:2 and PUFA were found in females in comparison to males. Percentage of tFA in subcutaneous fat showed no differences between hunted bears and the ones that died of other reasons, but interestingly tC18:1 was found in all bears (females 2.76±1.48%, males 3.09±1.26%). Free-ranging bears may obtain tFA from different dietary sources but the predominant source of tC18:1 is processed human food (hydrogenated vegetable oil found in many processed foods) which also contains tC18:1 in higher percentage than ruminant’s fat. Further research should be focused on determination which C18:1 isomers are predominant in subcutaneous adipose tissue of brown bear in Croatia. Results could help in bear management strategies.