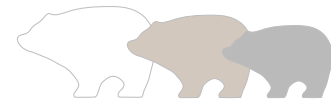


POSTER PRESENTERS & SESSIONS



PHYSIOLOGY

POSTERS 1 – 17 TIKAHTNU 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*) 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

Omics 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

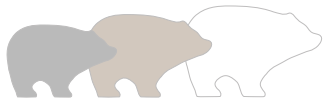
Author: Lana Vrankovic

Spondylodiscitis in Brown Bear (*Ursus arctos*)? A Case Report

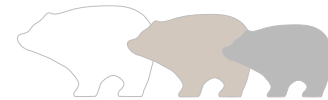
Author: Tomasz Zwijacz

Airborne Fungi in the Cave Frequently Used as a Den by Brown Bear- Preliminary Study

Author: Tomasz Zwijacz



POSTER PRESENTERS & SESSIONS



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 ussuricus*)

Author: Gye Seon Kim

BROWN BEAR/GRIZZLY BEAR

Capture-Related Mortalities in Brown Bears in Scandinavia 1984-2015: A Review of 2,047 Captures

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

Brown Bear Recolonization, Population Structure and Status in Southern Scandinavia: Transboundary Research and Monitoring by Low-Budget Methods, 1982-2015

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

ASIATIC BLACK BEAR

Threat Assessment of Asiatic Bears in India

*Author: Biba Jasmine**

Conservation Priority Areas of Rare Mammals under the Background of Climate Change in Northeastern China

Author: Luana Xiaofeng

BLACK BEAR

Identifying American Black Bear (*Ursus americanus*) Highway Crossings in Central Georgia, USA

Author: Mike Hooker

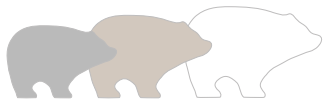
BROWN BEAR/GRIZZLY BEAR

Tracking the Brown Bears in Northeastern Turkey

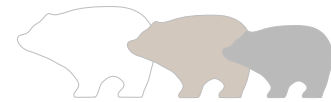
Author: Aysegul Coban

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**



POSTER PRESENTERS & SESSIONS



Bear Use Trends at McNeil River State Game Sanctuary

Author: Thomas Griffin

Himalayan Brown Bear Predation on Livestock in Pangi 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

POLAR BEAR

Harvest Monitoring for Polar Bears in the Face of Climate Change

Author: R. Bradley Benter

Polar Bear Management in the United States

Author: Hilary Cooley

A Critical Examination of the Inconsistent Status Designations of the Polar Bear under United States, Canadian, and International Legal Regimes

Author: Brendan Cummings

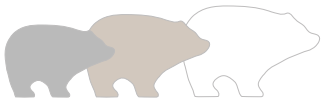
FEEDING ECOLOGY AND DIET

POSTERS 40 – 55 TIKAHTNU FOYER

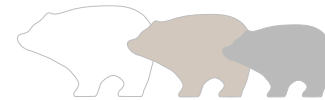
ASIATIC BLACK BEAR

The Prediction of Seed Shadows of Woody Plants by Released Asiatic Black Bear (*Ursus thibetanus ussuricus*) in the Jirisan National Park

Author: Dae Ho Jung



POSTER PRESENTERS & SESSIONS



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

POSTERS 56 – 59 TIKAHTNU FOYER

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**

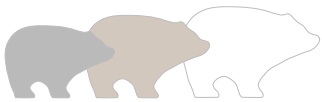
POLAR BEAR

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

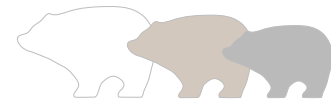
Author: Todd Atwood

When Sharing Is Not Caring: An Arctic-Host Parasite Sharing Network

*Author: Sophie Watson**



POSTER PRESENTERS & SESSIONS



BEHAVIOR

POSTERS 60 – 67 TIKAHTNU 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

HABITAT

POSTERS 68 - 84 TIKAHTNU A/B

ASIATIC BLACK BEAR

Detection of Fegaceae 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 Gantchoff

Ecology of Black Bears (*Ursus americanus*) in Urban/Suburban Habitats
Author: Nicholas Gould-Strules

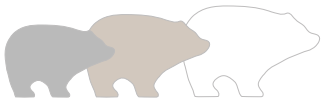
Niche Separation of Sympatric Grizzly and Black Bear
*Author: Amy Macleod**

Agent Based Modelling of Black Bear Foraging in Whistler, BC: An Effort in Reducing Human-bear Interactions
Author: Jessa Marley

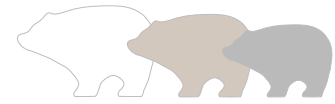
Black Bears Recolonize Wildlife Corridor between Ocala and Osceola National Forests, Florida, USA
Author: Brian Scheick

BROWN BEAR/GRIZZLY BEAR

An Integrated Approach to Resource Use of Brown Bears in Katmai National Park, Alaska
*Author: Joy Erlenbach**



POSTER PRESENTERS & SESSIONS



Grizzly Bear Denning Ecology and the Effects of Human Activity in Arctic Alaska

Author: Richard Shideler

Brown Bear in Ukraine: Ecological Features

Author: Maryna Shkvyrja

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

POSTERS 85 – 88 TIKAHTNU C/D

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

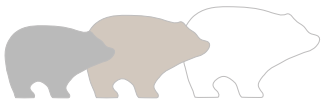
Author: Mami Kondo

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

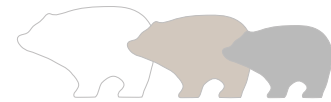
*Author: Rachel Wheat**

Genetic Status and Structure of Brown Bears in the Bryansk Region (Russia)

Author: Elena Sitnikova



POSTER PRESENTERS & SESSIONS



DEMOGRAPHY/ABUNDANCE/ DENSITY

POSTERS 89 - 101 TIKAHTNU C/D

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

BROWN BEAR/GRIZZLY BEAR

Temporal Analyses of Effective Population Size during Recovery and Range Expansion in the Northern European Brown 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

SUN BEAR

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

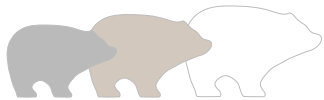
*Author: Lorraine Scotson**

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

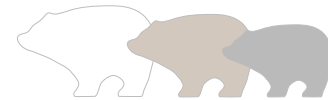
Author: Florent Bled

Combining Multiple Sources of Information from Evolving Long-Term Monitoring Studies to Estimate Cause-Specific Survival

Author: Christophe Bonenfant



POSTER PRESENTERS & SESSIONS



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

BLACK BEAR

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

Author: Natsuko Fukuda

New Technologies are Saving Bears at Yosemite National Park

Author: Ryan Leahy

Spatial Distribution of Black Bear Incidents in Michigan

Author: Jamie McFadden-Hiller

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**

Impacts of Human Hunting on the Foraging Behavior of Brown Bears in Sweden

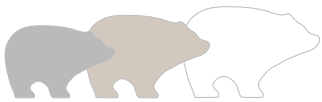
*Author: Hanna Kavli Lodberg-Holm**

Do Wolves Avoid Brown Bears? Large Scale Effects of Humans and Bears on Wolf Pair Establishment in Scandinavia

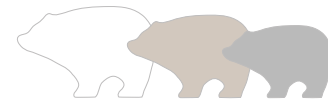
*Author: Cyril Milleret**

Do Scandinavian Brown Bears (*Ursus arctos*) Avoid Human Dominated Habitats Following Encounters with Humans?

Author: Gro Kvelprud Moen



POSTER PRESENTERS & SESSIONS



Brown Bear Attacks on Humans in Europe: An Overview for the Period 2000-2015

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

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

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

BLACK BEAR

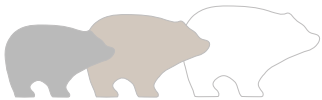
Using Lay Observers to Provide Qualitative Behavioral Data on Black Bears to Inform Park Management: the Pros and Cons of Monitoring via an Opportunistic Reporting System

Author: Anne Braaten

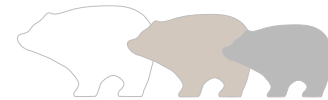
BROWN BEAR/GRIZZLY BEAR

Making the Most of Citizen Scientists in Brown Bear Studies in Canada's Rocky Mountain National Parks

*Author: Sarah Elmeligi**



POSTER PRESENTERS & SESSIONS



**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



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bear research including GPS systems,
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TRANS FATTY ACIDS IN SUBCUTANEOUS ADIPOSE TISSUE IN BROWN BEARS IN CROATIA

Lana Vranković¹, Ivančica Delaš², Marina Horvatiček², Slaven Reljić¹, Đuro Huber¹, Zvonko Stojević¹, Jasna Aladrović¹

¹*Faculty of Veterinary Medicine, University of Zagreb, Zagreb, Croatia*

²*School of Medicine, University of Zagreb, Zagreb, Croatia*

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 (*t*FA) 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 *t*FA. 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, *cis*C18:1). 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 *t*FA in subcutaneous fat showed no differences between hunted bears and the ones that died of other reasons, but interestingly *t*C18:1 was found in all bears (females 2.76±1.48%, males 3.09±1.26%). Free-ranging bears may obtain *t*FA from different dietary sources but the predominant source of *t*C18:1 is processed human food (hydrogenated vegetable oil found in many processed foods) which also contains *t*C18:1 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.