# WHY BEARS DEN

K-4 CURRICULUM TEACHER'S GUIDE FOR PPT

## WHY BEARS DEN

# How to approach the lifecycle; introduce behavior and biology

Black Bears have developed and adapted complex systems to be able to slumber for 3 months or more over the winter. In this ppt/audio/visual presentation, we will explore the denning cycle with younger students as a way to introduce many 'amazing' facts, how bears are both similar and much different from humans.

> CANADA IS HOME TO 25%, ¼, OR BETWEEN 120 & 160,000 BLACK BEARS – URSUS AMERICANUS

Bears have inhabited the Okanagan for thousands of years. They have adapted to the environment and learned to thrive. The similarities we share are easily illustrated: the climate, geography, and the abundance of food. We share these needs. In addition, we both need space to roam and grow, and very importantly, shelter.

But, bears have many attributes we do not. They can smell 5 x better than a bloodhound, run at 17 metres a second, climb trees at half that speed, and sleep for over 3 months without any bodily excretions. This module can be very engaging, fun and interesting.

### **NEW WORDS**

URSUS AMRICANUS -BLACK BEAR

SOW – FEMALE BEAR

**BOAR – MALE BEAR** 

CUBS (WHO ELSE HAS 'CUBS?')

SHELTER/DEN

HIBERNATION

DENNING

CALORIES

HYPERPHAGIA — (THE DRIVE TO EAT UP TO 20 HOURS A DAY IN THE LATE SUMMER)

RANGE

NATURAL FOOD SOURCE

PPT Slide Deck and Objectives – Description -ACTIVITY – You can stop the ppt anywhere and do a classroom exercise or discussion; or plan for them after the presentation SLIDE 1 – Zoe will introduce herself and the PPT (with video inset)

SLIDE 2 – Why Bears Den – Zoe explains winter/lack of food

#### SLIDE 3 -4 – Bears are Amazing

Zoe introduces BB's (as they relate to the Okanagan). Like us, they need space, water, food, and shelter. Amazing facts are that they eat everything, come in a variety of colours, sleep for months at a time, are very smart, and very curious. ACTIVITY: a) discuss the different coat colours – black, brown black, brown, mahogany, cinnamon and cream (Kermode)

b) do an excericise on how many IS 120,000 – what does that look like? 4 x the population of Penticton

#### SLIDE 5 – Denning V. Hibernation

Zoe introduces the science behind denning (slumber v. hibernation – near stasis), and why bears need to be aware of their surroundings in the den. This is where we discuss how many bears might be in a den, how the sow may give birth in the den, and why it is important not to soil the den.

#### SLIDE 6 – 9 Different Types of BB Dens

Zoe will explore the different types of bear dens and why. Sizes, shapes and reasons we should all be aware of the variety of dens – so we can recognize them and leave themalone.

ACTIVITY anywhere during the 4 slides – ask the children what their bedrooms are like to illustrate the variety of styles of the places we sleep – just like bears. SLIDE 10 - What Happens in the Spring - Zoe will in inset video

Zoe will now introduce the springtime emergence, and all the needs and challenges that factor into a successful 'new year' for bears and their families. Sows/boars need for greens, cubs need to learn to climb trees (and why).

### SLIDE 11 – In Spring, they need to EAT

What foods are available early in the season – greens to get their digestive systems working, caloric needs (starts at 4,000 and peaks in Aug at 24,000) SLIDE 12 – Zoe whole screen video showing the skull, and up the nose, plus the pelts – pads and claws

### SLIDE 13 – Bears eat EVERYTHING

Zoe will explain why the short learning time- when cubs learn their territory and need for food, and how that can put bears into conflict with humans **SLIDE 14 - Sows help cubs to learn about life** 

Zoe will explain that sows have 18 months to teach their cubs all the important things they need to survive on their own. It's a steep learning curve for cubs, but it isn't all work and no play, as seen in the slide. Zoe will tell the pool story. SLIDE 15 – Thank You

# ACTIVITIES & RESOURCES

- 1) Draw your favourite coloured bear
- 2) Discuss how much is 140,000 units or 'bears'?
- After seeing the dens, build (construct) a den or dens (tarps over a small table works well), students could draw the ideal 'den' for their taste
- 4) Compare the caloric needs for bears v. humans: bears need between 4 – 24,000 a day human need 1000 to 2500 a day
- 5) Discuss a bear's skull and body – to understand why it helps them survive in their habitats
- 6) Explore how short a time a sow has to teach her cubs (as compared to human children)

Colouring sheets and activities downloaded from RDOS Website: <u>Teachers</u> <u>Resources K-7 and Activities</u> <u>for Children | RDOS</u>

> Bear Den colouring sheet Bear – Walk about activity And much more

Photo Examples of Activities:



Building a bear den using table and simple tarps. Gives students a chance to understand how small a den is and how cramped it can become over winter.

I usually choose a 'sow' who chooses two or three cubs to take in the den with her.



Use the worksheets



Do a wall mural; some have used paper plates for the bear's head