TRANSPORT OF AN AMERICAN BLACK BEAR TAKES MORE THAN HONEY
American black bear (Ursus americanus)
Black Bear facts..

... classified as Least Concern by the IUCN, their numbers are increasing!

... natural habitat Alaska, Canada, Rocky Mountains to Mexico and Appalachia to Florida

... lives solitary in big territories, presumably in forest, mountains and swamps

... active during day and night

... have bad eyesight, but very good sense of smell and good hearing

... excellent tree climbers
Black Bear or Grizzly?
Hibernation

Black bears spend the winter hibernating in their dens. Dens are made in caves, burrows, brush piles or other sheltered spots.

The duration of hibernation varies by the climate.

The bear sustains on the fat built up in the summer during hibernation. Bears use 30% of their body weight during hibernation.
Seasonal feeding

Varying energy needs: eats more in the summer (2-4 months before hibernation) to build the fat reserve for the winter hibernation

Black bears are omnivores: feed on wide range of food, depending on availability
- presumably plants (grasses, twigs, nuts, roots, fruits, berries and sprouts), fish, insects (ants), larvae, honey, small to medium sizes mammals (deer fawns and moose calves)
- some areas of coastal British Columbia and Alaska bears also feed on spawning salmon
Reproduction

Mating occurs in June, July and August

Female start reproducing at an age of 3-4 years, males mostly a year later

Gestation period is 220 days, the bear gives birth during hibernation in the den in January/February

Litter size varies between 1-5 cubs, but 2 cubs is the average

The cubs are weaned at 6-8 months age, but stay approximately 2 years with their mother
  - Female black bears mate every 2 years: slow reproduction

Longevity in the wild is 20-25 years
Black bear in captivity

*Behavioral needs* need to be fulfilled

**Foraging motivation**
- Provide multiple meals per day, hide food, feeding enrichment
- Respect seasonal physiology
- Low calorie in winter, high calorie in summer

**Big enclosure size and enclosure complexity**
- Non-consummatory enrichment: balls, tires, etc.
- Various hiding spaces
- Different types of substrates: alfalfa, shredded paper, wood shavings, sand
Black bear in captivity

Insufficient management can lead to behavioral problems: *stereotypy*

- Pacing
- Oral stereotyped: tongue flicking, over-grooming
- Weaving- swaying
- Head-swaying
- Stereotypic swimming

Pacing
Stereotypy Behavior

Oral stereotypies

- ‘Mouth’: mouth is open for more than 5 seconds ≠ yawning
- ‘Tongue flick’: tongue is flicked in and out of mouth
Stereotypy Behavior during transport

During transport pacing is suppressed, but oral stereotypies and/or rocking in cage can be more apparent

Note that this is a sign of distress!

- Place the cage in a quiet and dark environment
- Consider sedation when bear is hurting itself

Over-grooming and Self-mutilation
Transport

Crate must be big enough
- Wide: to turn around
- High: to stand up entirely

Soft bedding should be provided so that the bear can lie comfortably

Dark crates are recommended to reduce stimuli from surroundings

Source: Live Animal Regulations, 44th edition, 2018
Transport

2 to 3 days before travel reduction of food intake
Prior to departure a light meal could be provided
If travel is longer than 24u, then food and water should be provided

◦ Once daily: 1 kg meat/20 kg bodyweight.
Sedation

Estimated weight between 100-750 kg

Induction:
- 2.5 mg/kg tiletamine-zolazepam + 0.05 mg/kg medetomidine I.M.
  OR
- 10-11 mg/kg ketamine + 1-11 mg/kg xylazine I.M.

Supplemental drug: 2 mg/kg ketamine + 0.025 medetomidine

Avoid use of opioids because of high risk of respiratory depression and hyperthermia

Bears known to arouse spontaneously, closely monitoring of recovery signs recommended!

LAN’s – Long Acting Neuroleptica’s

Is a major tranquilizer = Antipsychotica

- Prolonged sedation
- Calming effect on brain level
- Animals are less heavy sedated
- Better eating and drinking remains
Departure Zoo

Hemker Park & Zoo
Freeport, Minnesota USA

1977: Started by Mark and Joan Hemker => named Hemker Game Farm
1980: first (black) bear
1994: the Hemker Wildlife Park opened to the public
2008: became Hemker Park & Zoo
Destination Zoo

Forestia Zoo in Belgium
Started early ‘70
Mainly European animals
Live semi-wildly
Focus on natural habitat
Departure Chicago O’Hare International Airport, USA  26 July 2019
Black bears are strong...!!
Arrival Amsterdam Schiphol Airport, The Netherlands
Loading Amsterdam Schiphol Airport, The Netherlands
Arrival Forestia Zoo, Belgium
Arrival Forestia Zoo, Belgium
In New Enclosure
Conclusion

When transporting (American) Brown Bears:

- Reduce feed intake before departure
- Comfortable and big enough transport cage and strong enough!
- Recognize signs of stress and how to respond to this
- Sedation not always needed, can be beneficial in some circumstances
Questions?