

Figure 1 Seasonal Feeding Guidelines of Asiatic Black Bears (*Ursus thibetanus*) ©ElsePoulsen

Season	Behavior Notes	Diet & Presentation Notes	Calendar of Diet Adjustment				
			Category	Items	Ratios		Date Range <sup>1</sup>
					With chow	Without Chow	
<b>FALL</b>	Asiatic black bears move into period of hyperphagia. Will be voracious eaters, as they put on weight to get them through denning in the coming winter and the post-denning wander in the ensuing spring. Fish, berries, fruits, and nuts are a large part of the Asiatic black bear diet.	Chow Meat  Vegetation	Omnivore chow or bear diet <sup>2</sup> Fish Meat Fruit and Vegetable Materials [nuts, berries, fruits, leafy greens, browse, root vegetables]	≤ 30% = 15% = 10% = 45%	0 = 21% = 14% = 65%	August - November	
	Asiatic black bears move into period of metabolic depression characterized by a marked decrease in appetite, decrease in activity level, bears repeatedly move on and off feeding grounds to investigate possible den sites and to nest build.	Chow Meat  Vegetation	Omnivore chow or bear diet Fish Meat Fruit and Vegetable Materials [nuts, berries, fruits, leafy greens, browse, root vegetables]	≤ 30% = 15% = 10% = 45%	0 = 21% = 14% = 65%	October - November	
Fall Enrichment	In the fall bear(s) will need intensive enrichment which includes mimicking feeding strategies and choice of nesting sites. Winter denning sites should be available, either by giving the bear the ability to dig dens in their enclosure, or giving them access to their indoor winter denning bedrooms, and enough fresh bedding material to make up their winter nests, on average 1.5 bales of straw-type vegetation per bear is suitable for winter denning						
<b>WINTER</b>	During the onset of metabolic depression the bears' appetites begin to decrease. Also they come and go from feeding grounds and begin to investigate possible winter denning sites. They become interested in nest building. Since a human cannot gauge if each bear has received enough nutrients and calories during hyperphagia there must always be one or several piles of chow or whole foods available to the bears throughout denning. And there	Chow  Water	Omnivore chow or bear diet Whole foods – single pile ex. nuts Fresh water source	100% 0	0 100%	October - March	

	<p>must always be a source of fresh water available to them. Food variability tends to interfere with denning as bears will get up for treats therefore a selection of foods is not offered. The objective of the single piled chow or whole food such as nuts is only to provide those bears that were not able to compete with con-specifics to gain nutrients and weight according to need.</p>					
Winter Enrichment	<p>All enrichment events, training, and food variability must cease as they directly interfere with denning. Giving the bear the proper conditions for effective denning is the enrichment. Bears are not to be sought-out for programs or called for keeper interaction. They are to be left alone to den.</p>					
<b>SPRING</b>	<p>In the wild bears get up in the spring when the weather warms up a bit and the snow and ice are melting. At this time there is still no new food available to them in the wild, so they root around and find overwintered food sources like old berries and fruits, tender shoots and branches. Food is still scarce in the spring so the wild bear(s) caloric intake is not high. When bears come out of denning they therefore still rely on their food stores to get through the spring. The captive bear must not come out winter denning bone thin and must still have fat reserves on him. Zoos often make the mistake of immediately offering their newly risen bears a full diet with lots of calories which should actually be fed during the late summer and fall. It's at this time that captive bears become fat, because they are now given additional foods to store on top of the previous fall's fat reserves. The captive black bear diet can include more meat proteins at this time of year.</p>	<p>Chow Meat  Vegetation</p>	<p>Omnivore chow or bear diet Fish Meat Fruit and Vegetable Materials [nuts, dried fruits, browse with fresh spring growth, root vegetables]</p>	<p>≤ 30% = 15% = 15% = 40%</p>	<p>0 = 21% = 21% = 58%</p>	<p>March - May</p>
Spring Enrichment	<p>In the spring bears will need intensive enrichment which includes mimicking wild feeding strategies.</p>					
<b>SUMMER</b>	<p>The caregiver should be increasing the food variability as the summer passes mimicking the foods appearance in the wild as it grows. Therefore</p>	<p>Chow Meat</p>	<p>Omnivore chow or bear diet Fish Meat</p>	<p>≤ 30% = 9% = 7%</p>	<p>0 = 12% = 10%</p>	<p>June - August</p>

	fruits and berries should become abundant midsummer in the captive diet. Tree branches and grasses, sedges, and clover should always make up part of the bears summer diet	Vegetation Insects	Fruit and Vegetable Materials [browse, leafy greens, fruits, root vegetables] Rotting logs with insects, meal worms, wax moth larvae etc.	= 54%	= 78%	
Summer Enrichment	In the summer bear(s) will need intensive enrichment mimicking their normal feeding strategies and choice of day-bedding sites.					

Notes

1. Date Range – The date range is a guideline only. <http://www.iucnredlist.org/details/22824/0>, Shimoruru 2012 The increase or decrease in diet must be responsive to the bears' appetite changes. Thus, during hyperphagia – if bears eat all of the foods offered continue to increase the daily ration by significant amounts. The only way to gauge if the bears are sated is if there is food left over. During the onset of metabolic depression, when the bears slow down, food is only decreased according to the bears' decreased appetites. There must always be foods leftover in both scenarios.