

# Stereotypic behavior in captive bears and the impact of enrichment

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## What is stereotypic behaviour?

Stereotypic behaviour is defined as a movement and/or action that is performed repetitively with no apparent goal or achievement associated with its completion (Mason, 2006). Stereotypic behaviours are abnormal because they are not performed by animals in the wild, only by those in captivity and serve as welfare indicators (Mason et al., 2007; Wagman et al., 2016).

## Stereotypic behaviour in bears

The most common stereotypic behaviour performed across bear species is stereotypic pacing. Researchers characterize stereotypic pacing as walking back and forth in a straight line between the two same points for a minimum of three repetitions (Carlstead & Seidensticker, 1991; Anderson et al., 2010).

# 40-60 %

of the total time spent active is spent performing locomotory or stereotypic pacing by the captive bears at the National Zoological Park (Carlstead et al., 1991)

## What causes stereotypic behaviour?

Stereotypic behaviours can be attributed to the inadequate environments of captive enclosures (Fischbacher and Schmid, 1999). Captive enclosures are often incompatible with the natural lifestyle of bears and inhibit expression of wild-type behaviours (Forthman et al., 1992; Carlstead & Seidensticker, 1991).



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## Why do bears perform stereotypic behaviour?

The performance of stereotypic behaviours by captive bears is suggested to arise from frustration and boredom associated with a poor enclosure (Carlstead and Seidensticker, 1991; Mason et al., 2007).

## Implementing Enrichment

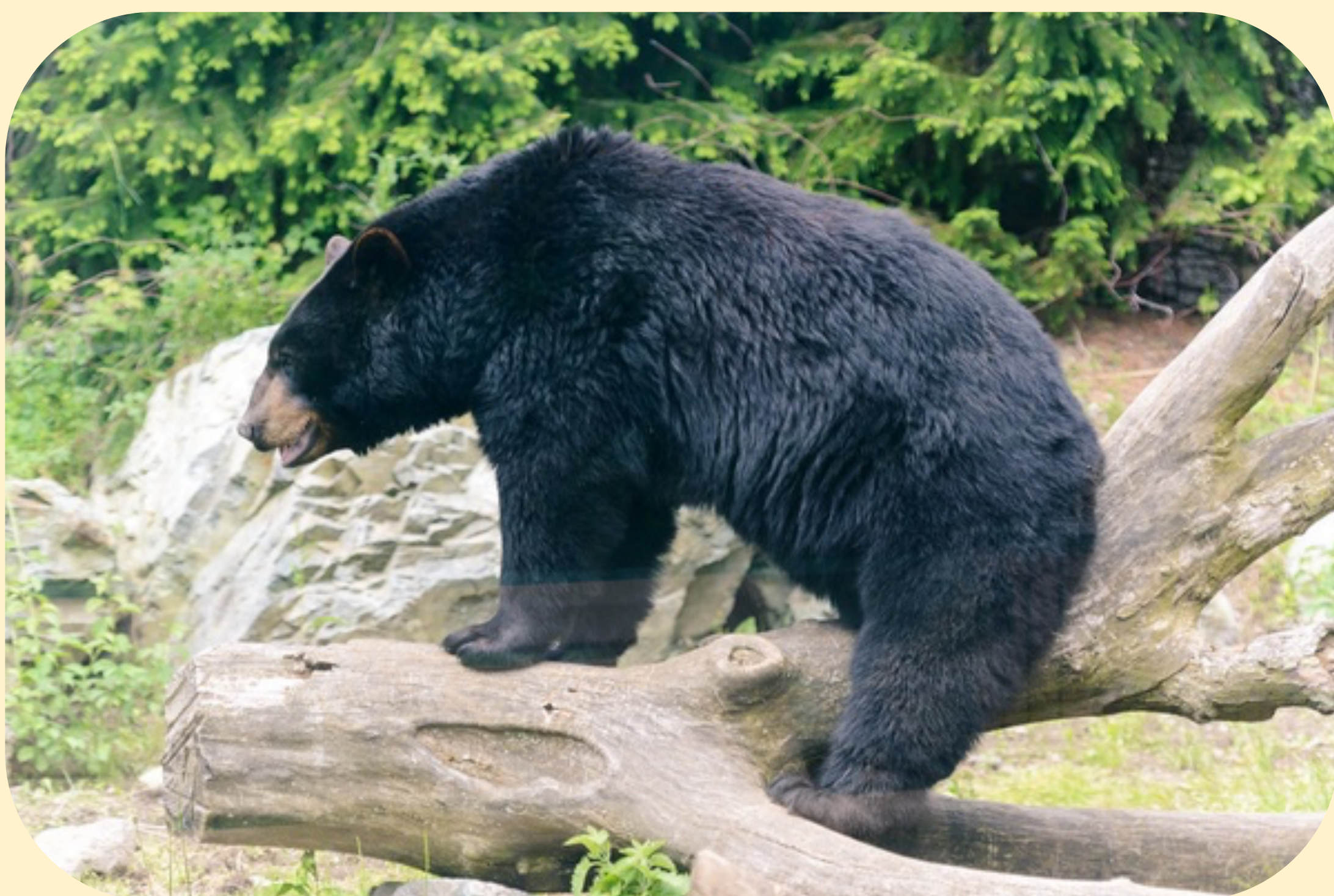
Enrichment is implemented through the enhancement of enclosures, stimulating feeding methods, and olfactory stimuli (Carlstead and Seidensticker, 1991; Law & Reid, 2010).

Feeding enrichment examples include:

- Manipulatable objects
- Food hiding
- Scent tracks
- Intermittent presentation
- Increased frequency of feeding
- Increased variety of food.
- Scatter feeding

## Environmental enrichment

Environmental enrichment is a strategy to alleviate stereotypic behaviours, improve welfare, and stimulate natural behaviours (Carlstead et al., 1991; Schneider et al., 2014). Multiple studies have observed a significant reduction in the frequency of stereotypic behaviours when feeding enrichment is implemented.



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