

- Mean den entry/exit
- All bears in dens
- Some bears in dens; some still moving
- Cold temperatures, heavy snow or a poor berry crop may cause early den entry.
- Warm spring temperatures may cause early den emergence.
- Pregnant females typically den first and exit last.

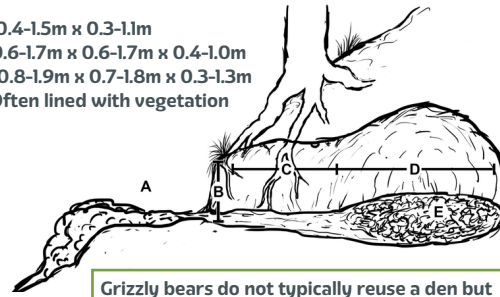
*Days of the Month 1=1-8; 2=9-15; 3=16-23; 4=24-31

Many bears reduce their activity and movements in late fall, even before they are near their den. Many will spend days around the den prior to entry and after den exit. Despite this lethargy, grizzly bears can react quickly if disturbed.

Bear Activity	Earliest Date	Latest Date
Arrival to Den Area	14 Oct	11 Dec
Den Entry	20 Oct	19 Dec
Den Exit	5 March	12 May
Departure from Den	20 March	24 May

Grizzly bear dens are excavated into a slope while black bears will also den in hollow logs, or under stumps/logs. Excavated black bear and grizzly bear dens overlap in dimensions, but black bear dens are typically at lower elevations compared with grizzly bear dens.

- A. Porch
- B. Entrance 0.4-1.5m x 0.3-1.1m
- C. Tunnel 0.6-1.7m x 0.6-1.7m x 0.4-1.0m
- D. Chamber 0.8-1.9m x 0.7-1.8m x 0.3-1.3m
- E. Bed Often lined with vegetation

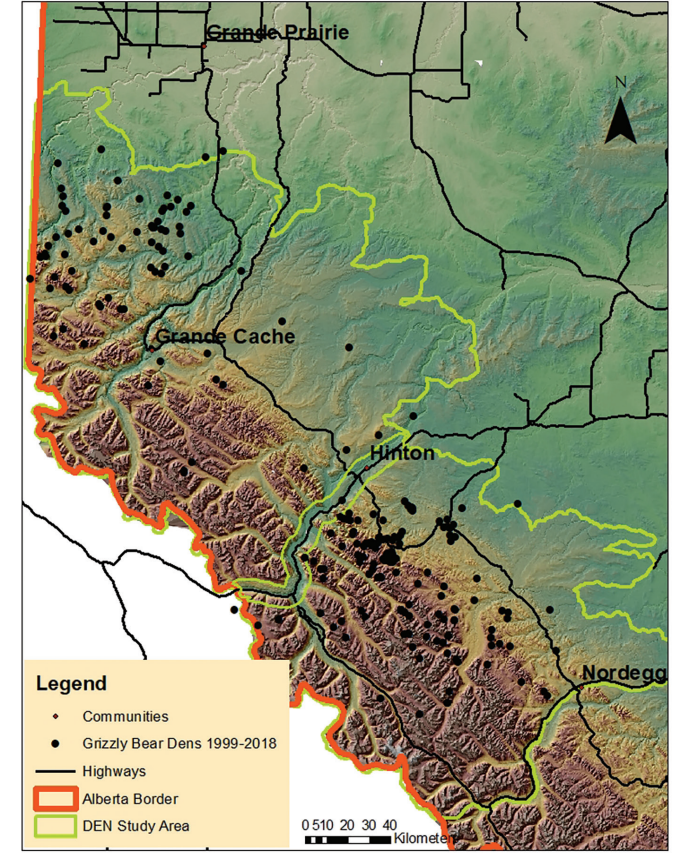


Grizzly bears do not typically reuse a den but will dig a new den near a previously used den. (Figure from Faure 2020)

Females give birth in their dens in late January/early February. The cubs are tiny and helpless. Disturbance causes stress and can result in reduced cub growth or mortality.

Females with new cubs can linger up to 45 days near the den in the spring.

GRIZZLY BEAR DENNING in West-Central Alberta





Dens can be dug beneath logs, trees, boulders or roots.



False starts and multiple dens in an area can occur.



Dens can be dug into small terrain features.



Bears often pull out bedding (twigs/grass) in the spring. Excavated debris can be visible below the entrance of some dens.

STEPS TO AVOID A DENNED GRIZZLY BEAR

In the Office

- Use the fRI Den RSF map to find high value den areas and/or use the table below.

In the Field

- Conduct ground-based surveys during the SUMMER to look for previous dens.
- Conduct aerial surveys during the early stages of denning where old dens were found and in high value den areas.
- Look for tracks in fresh snow and/or excavated debris strewn down a slope.
- If an active den is found, stay 1 km from the den until late May.



Dens can be hidden by dense vegetation.



Dens can look like erosion and can be found along riparian slopes.



A collapsed den.

KNOW THE HABITAT WHERE GRIZZLY BEAR DENS ARE LIKELY TO OCCUR

COVER	Dense
ROADS	> 150 m away
WELL SITES	> 300 m away
FOREST	Dry open conifer stands
SPRING FOOD	Hedysarum alpinum (sweet vetch) in area 
ELEVATION	795 m – 2284 m
SLOPE	10 – 60°
ASPECTS	Likely to accumulate snow
SOIL	Not saturated or organic

Dens may occur outside predicted areas. Workers should be trained to recognize old dens and den habitat, especially during winter work when dens become invisible once covered with snow. Workers should be educated on grizzly bear den behaviours and important denning dates.

We would like to thank the Grizzly Bear Program's Partners, in particular West Fraser: Hinton Division for the funds and desire to produce this brochure. Thank you to Dr. Karine Pigeon for the photos and much of the den site information.