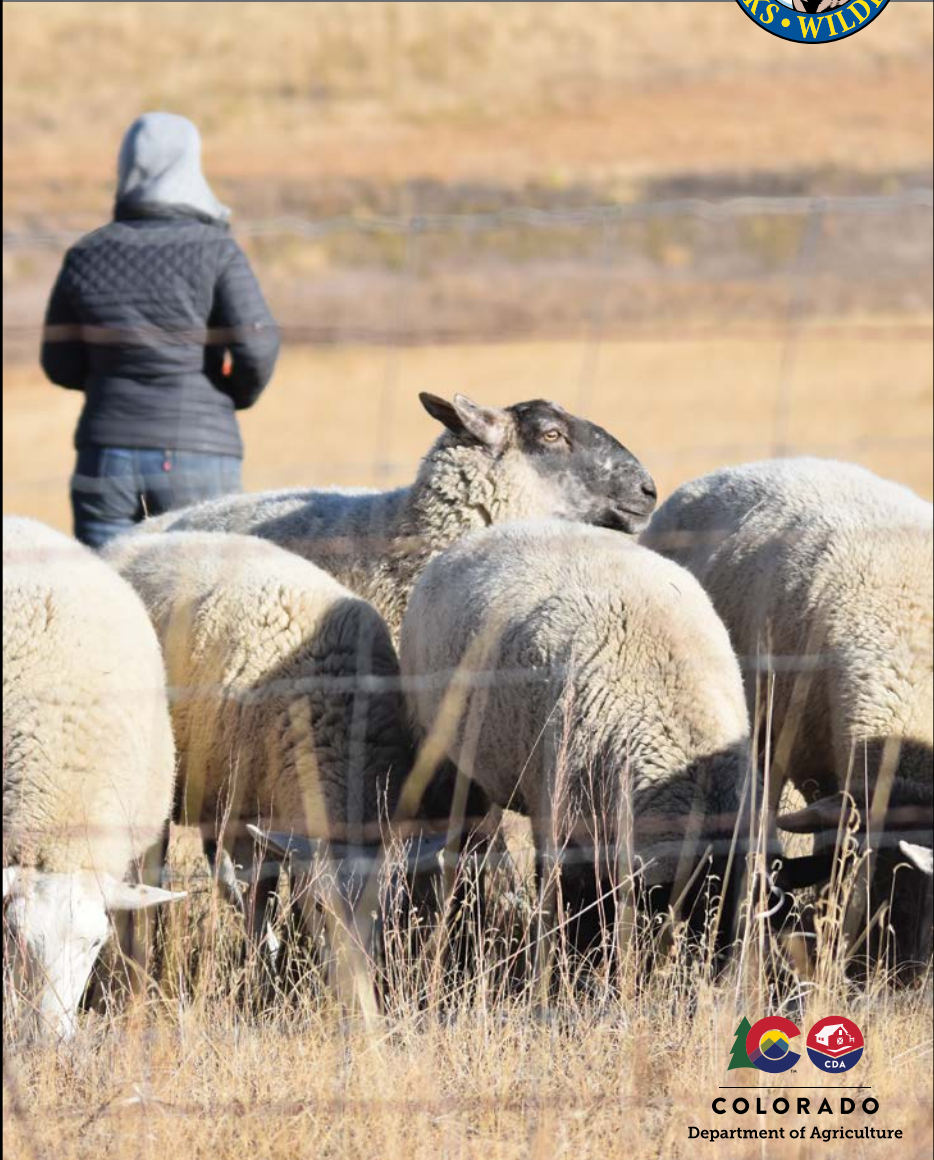


COLORADO PARKS & WILDLIFE

# A Producer's Guide to Livestock Depredations

WITH DAMAGE PROGRAMS AND CPW AREA OFFICE DIRECTORY



**COLORADO**  
Department of Agriculture

[cpw.state.co.us](http://cpw.state.co.us)

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# How to Use this Guide

This guide has been developed for Colorado's livestock owners and is intended to be used as a general reference guide to assist with identifying livestock depredations. It contains typical attack and feeding characteristics of various predators, CPW Office contact information, and general livestock compensation information.

It does not describe every situation that might occur or other causes of livestock mortality. Local CPW staff are skilled in investigating livestock depredations and are your best resource to determine if your livestock was depredated.

## IF YOU SUSPECT YOUR LIVESTOCK WAS DEPREDATED

### 1 Contact your local CPW District Wildlife Manager (DWM) or CPW Area Office

- During normal business hours (8am - 5pm, Mon - Fri), contact your local DWM or CPW Office. A map of office locations and phone numbers is on page 10.
- If outside normal business hours, contact your local DWM or Colorado State Patrol Dispatch.
- Be prepared to provide detailed directions to the location of the carcass.

### 2 Preserve any evidence and take photographs

- Leave the carcass where found.
- Do not attempt to move, bury, or incinerate the carcass.
- Take photographs (close up and at distance) to document damaged areas of the animal and send photos to your DWM.

### 3 Arrange to meet the DWM where the damage occurred

- If you cannot physically be present, arrange for another person to be available.
- Your DWM will notify you of the results of the investigation and provide you with appropriate damage claim paperwork.

# CPW Area Office Phone Directory

CPW offices are open Monday–Friday, 8am–5pm. For after-hours emergencies, contact the Colorado State Patrol at (303) 239-4501 or your local Sheriff's Department.

<b>Brush</b> . . . . .	(970) 842-6300
28167 County Rd. T, Brush, CO 807230	
<b>Colorado Springs</b> . . . . .	(719) 227-5200
4255 Sinton Rd., Colorado Springs, CO 80907	
<b>Denver</b> . . . . .	(303) 291-7227
6060 Broadway, Denver, CO 80216	
<b>Durango</b> . . . . .	(970) 247-0855
151 E. 16th St., Durango, CO 81301	
<b>Ft. Collins</b> . . . . .	(970) 472-4300
317 W. Prospect Rd. •Fort Collins, CO 80526	
<b>Glenwood Springs</b> . . . . .	(970) 947-2920
0088 Wildlife Way, Glenwood Springs, CO 81601	
<b>Grand Junction</b> . . . . .	(970) 255-6100
711 Independent Ave., Grand Junction, CO 81505	
<b>Gunnison</b> . . . . .	(970) 641-7060
200 S. Spruce St, Gunnison, CO 81230	
<b>Hot Sulphur Springs</b> . . . . .	(970) 725-6200
346 Grand County Rd. 362, Hot Sulphur Springs, CO 80451	
<b>Lamar</b> . . . . .	(719) 336-6600
2500 S. Main St., Lamar, CO 81052	
<b>Meeker</b> . . . . .	(970) 878-6090
73485 Hwy. 64, Meeker, CO 81641	
<b>Monte Vista</b> . . . . .	(719) 587-6900
0722 S. Rd. 1 E., Monte Vista, CO 81144	
<b>Montrose</b> . . . . .	(970) 252-6000
2300 S.Townsend Ave., Montrose, CO 81401	
<b>Pueblo</b> . . . . .	(719) 561-5300
600 Pueblo Reservoir Rd., Pueblo, CO 81005	
<b>Salida</b> . . . . .	(719) 530-5520
7405 Hwy. 50, Salida, CO 81201	
<b>Steamboat Springs</b> . . . . .	(970) 870-3333
925 Weiss Dr., Steamboat Springs, CO 80487	



# CPW Compensation Programs



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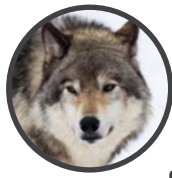
## GAME DAMAGE PROGRAM

- Provides compensation to livestock owners for damages caused by Big Game wildlife (mountain lion, black bear, etc.)
- Compensation is limited to direct losses (physical trauma resulting in injury or death) and veterinarian expenses.
- Claimants must meet specific eligibility requirements set in state statutes. CPW is not liable for damage caused by coyotes, bobcats, or domestic dogs.

## WOLF COMPENSATION PROGRAM

- Provides conflict minimization materials and compensation to livestock owners for damages caused by Gray Wolves.
- For damage to livestock and guard/herding animals caused by gray wolves.
- Compensation is limited to direct losses and veterinarian expenses for all livestock defined in 33-2.105.8 C.R.S., missing sheep, calves, and yearlings, and indirect losses (decreased weights and conception rates) to cattle or sheep.

More details on CPW livestock compensation can be found in CPW W-17 Regulations on CPW's website: [cpw.info/ch17-game-damage](http://cpw.info/ch17-game-damage)



# Wolves



### Common Attack Zones on Adult Livestock:

Tail, Hindquarter/Groin, Flank, Behind and Under Front Leg.

**Spacing between canine teeth:** 1 ½–2"

**Diameter of canine tooth punctures:** 1/4"

### ATTACK CHARACTERISTICS

- ▶ Wolves often attack from behind.
- ▶ Canine rake marks are often found on the animal's hocks and hindquarters.
- ▶ The tail may be missing or be stripped of hide.
- ▶ Wolves may also attack on the head, throat, front legs, and flank areas.
- ▶ Multiple kills of sheep in a single event can occur.

### FEEDING CHARACTERISTICS

- ❑ Wolves may consume entire carcass.
- ❑ Wolves consume large amounts during each feeding and preferential feeding patterns may not always be evident.
- ❑ Wolves can crush and consume large bones of adult livestock.
- ❑ Crushed skulls, severed spines and disembowelment common in smaller livestock depredations.



Canine rake marks on hindquarters. ©CPW



Canine rake marks on the groin and hindquarters. ©CPW

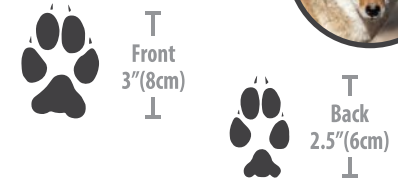


Wolves may scatter stomach contents, but preferential feeding patterns can vary. ©CPW



Width between canine marks is 1 ½–2". ©CPW

# Coyotes



### Common Attack Zones on Adult Livestock:

Tail, Hindquarter/Groin, Flank, Behind and Under Front Leg, Neck, Throat

**Spacing between canine teeth:** 1 ¾–2"

**Diameter of canine tooth punctures:** 1/8"

### ATTACK CHARACTERISTICS

- ▶ Will hunt as individuals or in packs, attacking prey from the rear, flank or throat areas.
- ▶ Sheep, goats and young calves are more susceptible to coyote predation, since coyotes prefer smaller prey.
- ▶ Will often attack the throat to suffocate the animal. Multiple puncture wounds to throat indicate the coyote re-adjusted its grip during the attack.

### FEEDING CHARACTERISTICS

- ❑ Feeding leaves jagged lacerations and splintered/chewed ribs, especially on smaller animals.
- ❑ The feeding site is often very messy and littered with tufts of hair, blood and tissue.
- ❑ Often mark kill sites by urinating and defecating soon after feeding.

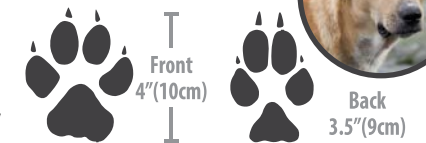


Domestic sheep killed by a coyote in California. ©CDFW/Flicker



Puncture wounds from a coyote attack. ©Government of Alberta

# Domestic Dogs



### Common Attack Zones on Adult Livestock:

Face/Nose, Hindquarter/Groin, Neck, Throat, Flank Tail

**Spacing between canine teeth:** 1 ¾–2"

**Diameter of canine tooth punctures:** 1/8"

### ATTACK CHARACTERISTICS

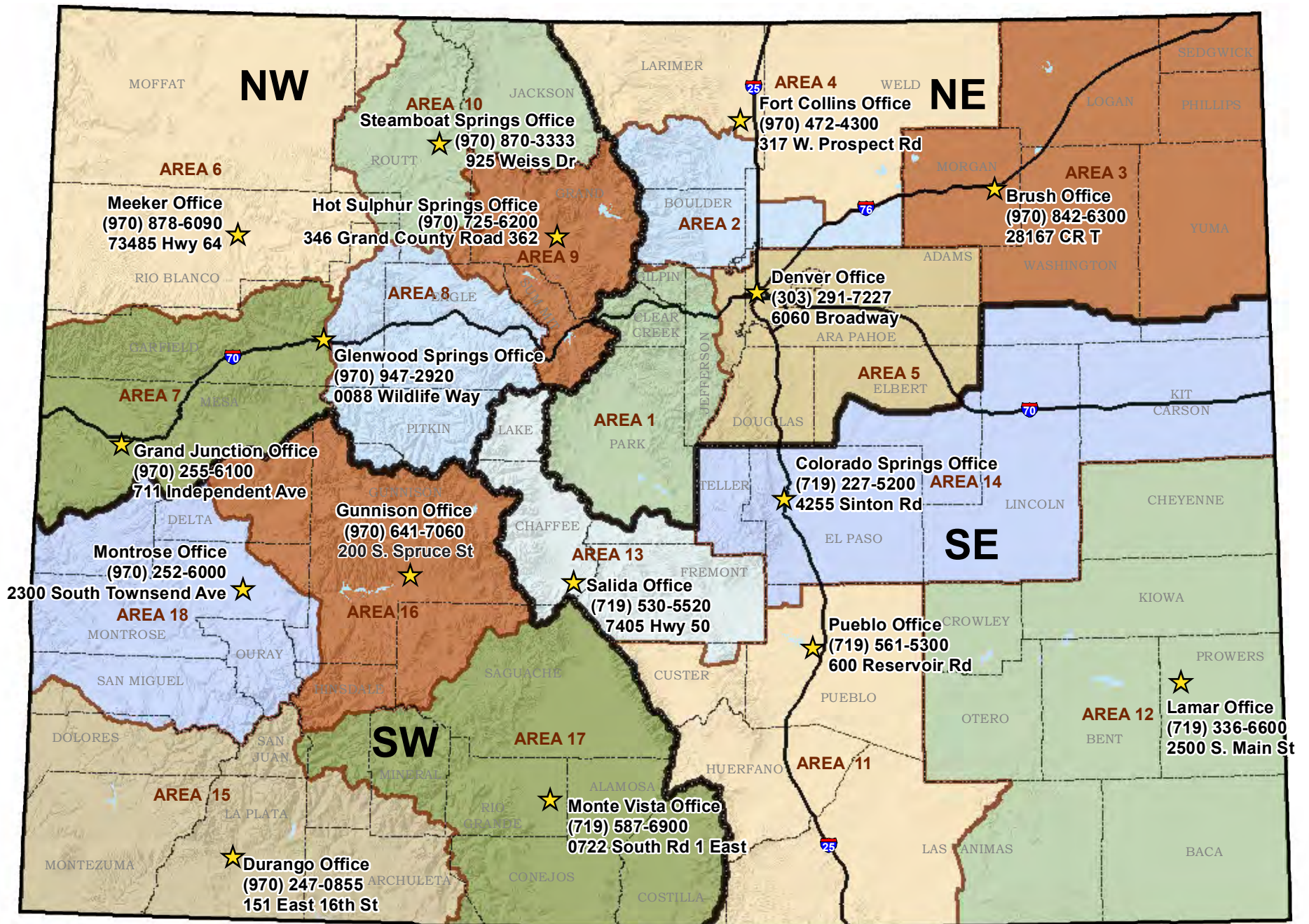
- ▶ Dogs attack indiscriminately and are inefficient, sloppy killers.
- ▶ Trauma is widespread due to multiple bites to any part of the animal's body.
- ▶ Motivated by the enjoyment of the chase rather than the need to feed.

### FEEDING CHARACTERISTICS

- ❑ Dogs Seldom feed on the carcass: If feeding occurred, carcass may be at or very near kill site.
- ❑ Messy feeding characteristics; Ragged or frayed wounds and lacerations.
- ❑ Tracks and teeth spacing highly variable due to many breeds and sizes.



# Map of CPW Area Offices







# Mountain Lions



### Common Attack Zones on Adult Livestock:

Neck, Throat, Skull

Spacing between canine teeth: 1 1/2– 2 1/4"

Diameter of canine tooth punctures: 1/4"

### ATTACK CHARACTERISTICS

- ▶ Smaller animals: Bite the head or neck and twist or pull to break the spine.
- ▶ Large animals: Bite the throat and windpipe to suffocate the animal.
- ▶ Lions are normally strong enough to maintain a hold on their prey with minimal re-adjustment.
- ▶ Lacerations may not show marks from all five of the lion's claws.
- ▶ Claw marks are knife-like, with very clean edges.

### FEEDING CHARACTERISTICS

- ❑ Lions prefer viscera to meat and will generally feed on the heart, lungs and liver first but can also feed on the neck, shoulders or hindquarters first.
- ❑ Before feeding, lions commonly pluck out the wool or hair from the hide.
- ❑ Unlike bears, lions do not normally eat the stomach, intestines or their contents.
- ❑ Lions commonly cache carcasses with available debris and re-visit the carcass multiple times to feed.



Claw marks are knife-like, with very clean edges. ©CPW

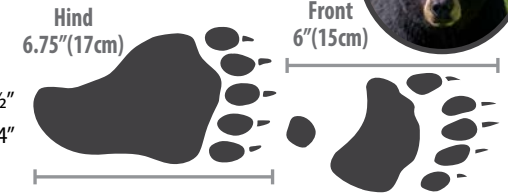


Canine tooth puncture wounds in the throat area made by a mountain lion. ©Government of Alberta



The open chest area, clean edges, and plucked hair are consistent with mountain lion feeding patterns. ©Government of Alberta

# Black Bears



### Common Attack Zones on Adult Livestock:

Withers, Spine, Neck, Skull

Spacing between canine teeth: 1 1/2– 2 1/2"

Diameter of canine tooth punctures: 1/4"

### ATTACK CHARACTERISTICS

- ▶ Bears will not usually pursue their prey over long distances, but once the animal is killed, they may drag it some distance to feed elsewhere.
- ▶ Bears are known to prey on all age classes of adult livestock but prefer calves, sheep and pigs.
- ▶ Bears will attack the head, neck and back: Lacerations may be left by the bear's teeth when it bites and by its claws when it attempts to grip its prey during the attack.
- ▶ Dull, non-retractable claws do not cleanly cut hide and tissue like the claws of a lion.

### FEEDING CHARACTERISTICS

- ❑ Bears will take advantage of any food source given the opportunity.
- ❑ Multiple kills of sheep in a single event are relatively common.
- ❑ Usually feed on meat before viscera but not always.
- ❑ Unlike wolves and mountain lions, bears often eat the stomach contents (rumen) of livestock.
- ❑ Bears rarely scatter remains or attempt to cover carcasses.



Bears rarely scatter remains or attempt to cover carcasses. ©CPW



The bear attack on this calf resulted in canine tooth puncture wounds over the spine. ©Government of Alberta



The bear attack on this sheep resulted in puncture marks to the skull and wounds to the back. ©Government of Alberta

# Canine Track Comparison



Depending on substrate, wolf tracks are about 5 inches long by 4 inches wide, with four symmetrical toes and identifiable claws; coyote tracks are similar, but are only about half the size. Large dogs can have tracks with similar dimensions to wolves.

WOLF



COYOTE



DOMESTIC DOG (LARGE)





## Feline Track Comparison



Felines have retractable claws, which rarely show in most substrates, and the overall shape of the track tends to be wider than they are long. Mountain lion tracks are very large, and other carnivores like bobcats, foxes, or coyotes will leave significantly smaller tracks.

**BOBCAT**



Front  
2"(5cm)

**MOUNTAIN LION**

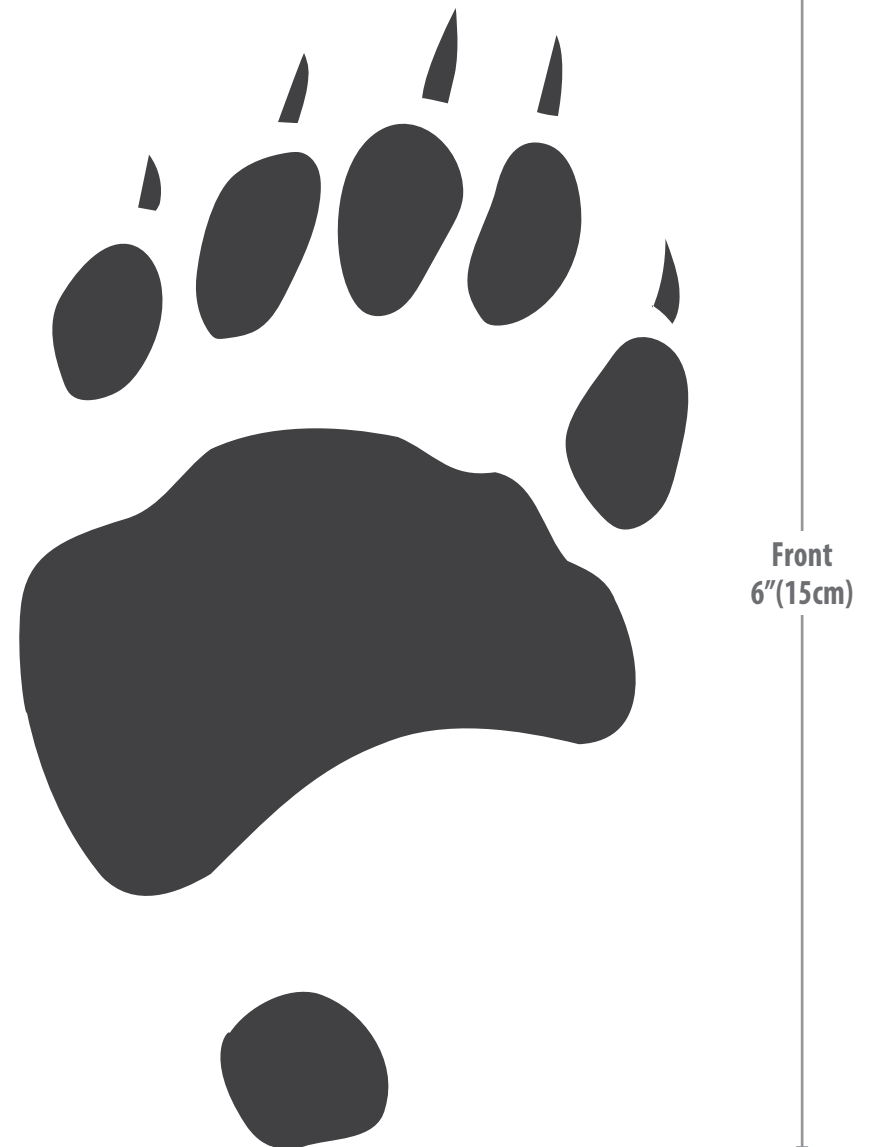


Front  
3.25"(8cm)

## Black Bear Track

Black bears have 5 rounded toes with large, blunt claws. The track is asymmetrical. Palm pad is wide, and curved and gets larger to the outside. The mid-portion of the front tracks often does not register, and there is a small round heel pad that sometimes registers behind the palm pad.

**BLACK BEAR**



Front  
6"(15cm)

# Sources and Further Reading

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## **Alberta Government**

*A Rancher's Guide to Predator Attacks on Livestock*  
[open.alberta.ca/publications/9781460115619](https://open.alberta.ca/publications/9781460115619)

## **Washington Department of Fish and Wildlife**

*Livestock Injury and Mortality Investigation*  
[wdfw.wa.gov/sites/default/files/publications/01581/wdfw01581.pdf](https://wdfw.wa.gov/sites/default/files/publications/01581/wdfw01581.pdf)

## **AgriLife Communications, The Texas A&M System**

*Procedures for Evaluating Predation on Livestock*  
[agrilife.org/westtexasrangelands/files/2023/05/Procedures-for-evaluating-predation.pdf](https://agrilife.org/westtexasrangelands/files/2023/05/Procedures-for-evaluating-predation.pdf)

**Robert C. Acorn and Michael J. Dorrance**  
**Alberta Agriculture and Rural Development**  
*Coyote Predation of Livestock. March 2010*



© LORI IVERSON/USFWS MOUNTAIN PRAIRIE





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