# Brown Bear: Identifying males and females in the field







ALASKA DEPARTMENT OF FISH AND GAME 1<sup>st</sup> Edition

# Brown bear identification guide

Hunters target brown bears for many different reasons: some prize them for their food, fat, fur, and medicinal values; others search for large bears for their prized trophy value. Whatever your reason for harvesting a bear, it is important that you learn how to identify a brown bear and determine its sex and/or age.

Test your skills at identifying males, females, and subadult brown bears by taking the ADF&G Brown Bear Identification Quiz in this guide. To improve your chances of harvesting an adult male, use this guide and watch "Take a Closer Look".

To watch "Take a Closer Look" and find additional information about brown bear natural history and hunting requirements visit the Division of Wildlife Conservation website at:

www.adfg.alaska.gov/index.cfm?adfg=brownbearhunting.resources

Once you've reviewed the material in this guide, please consider sharing this booklet with interested friends and other brown bear hunters or viewers. The center pages can be removed and taken into the field.



### Brown bear management

Getting to know the management objectives for your area may be helpful when making harvest decisions. Brown bears have a low reproductive rate compared to other large game species in North America. Females are generally over 5 years old before they have their first cubs and very few of those cubs reach breeding age themselves. Because of this low reproductive rate, the regulation of female bear harvest is an important tool to wildlife managers.

Bear populations and bear management strategies vary across our huge and ecologically diverse state. In some areas, the management objective may be to increase or maintain the brown bear population – in this case, managers may suggest hunters target adult male bears. Selecting adult males instead of females or subadults may make more brown bears available for future harvest. Alternatively, in some areas with high numbers of predators, mangers may wish to reduce the bear population. In these areas, managers may recommend harvesting bears across all age and sex structures. In all areas, hunting cubs or females accompanied by cubs is illegal. Cub bear means a brown/ grizzly bear in its 1<sup>st</sup> or 2<sup>nd</sup> year of life.

This guide is intended to help hunters distinguish between male and female brown bears so they can use that information to select the appropriate bear. Bear viewers will also benefit by knowing how to identify male or female bears.

The characteristics in this book are general and there are exceptions to all of the rules. Consider the criteria as a checklist and go through each characteristic to see which ones apply to the animal you are observing. Taking the time to observe several characteristics will help you differentiate the sex of the animal more reliably.

# Identifying brown and black bears

The color, or "phase," of a bear can vary from one individual to the next and may look different depending on the amount of ambient light or moisture. Brown bears (Ursus arctos) can range from near black or dark chocolate to blonde, and black bears (Ursus americanus) can vary in color from jet black to white.

	Brown Bear	Black Bear
Shoulder hump	Pronounced shoulder hump.	Little or no shoulder hump.
Facial profile	Concave face from the forehead to the tip of the nose.	Straight facial profile.
Tracks and claws	Robust, closely spaced or touching toes in a relatively straight toe arc. Long (2-4") gently curved claws. Front claw marks are usually over twice as long as the toe pads.	Toes on the front foot form a greater arc relative to brown bears. Short (2" or less) thick, sharply curved claws. The toes have more space between them than a brown bear.



### Brown bear adult male characteristics

1		
Ears	• Appear small compared to rest of head	
	• Ears set wide apart	
Head,	• Wide, square head and face	
neck and shoulders	• Thick, blocky muzzle	
silouluers	• Muscle bulges to create a visible "valley" down the middle of the forehead	
	• Massive shoulders wider than head	
	• Scarring on head and muzzle, missing ears	
Body shape	• Big males have very long legs	
and legs	• Front legs heavy and thick all the way through ankles and wide feet	
	• Legs, rump, and mid-section appear bulky	
Sex organs	• Penis sheath and testicles may be visible	
and urination	• Urinates straight down and forward between legs	

The only sure way to determine if the bear is male or female is to either see the penis sheath or wait long enough to observe urination.



Male urinating

Female urinating



Notice small ears, thick muzzle, bulky Notice wide face, small ears, valley down forehead, wide shoulders, thick legs and ankles.



Notice wide, square face, small ears, valley down forehead, long legs, bulky appearance, visible penis sheath.

### Brown bear adult female characteristics

Ears	• Appear small compared to rest of head	
Head, neck and shoulders	<ul><li>Smallish, narrow head</li><li>Tapered muzzle</li><li>Narrow shoulders same width as head</li></ul>	
Body shape and legs	<ul> <li>Legs appear shorter and thinner than male's legs</li> <li>Front legs appear to taper to narrower ankles</li> <li>Appear to be close to the ground because of shorter legs</li> </ul>	
Sex organs and urination	<ul> <li>A nursing female may be identified, even if her cubs are not present, by looking for nipples in the armpit area as she walks.</li> <li>Urinates outward and to the rear</li> <li>May squat to urinate</li> </ul>	

When viewed together, the relative difference between body size of subadult males and adult females is often minimal. Subadult males are not yet fully grown and may be confused with adult females.



Adult female (cinnamon) and subadult male



Notice smallish, narrow head, tapered legs.

Notice tapered legs, narrow ankles and shoulders.



Notice tapered muzzle and mammaries.

# Brown bear subadult characteristics

Ears	<ul> <li>Appear disproportionately large compared to rest of head</li> <li>Appear close together</li> </ul>
Head, neck and shoulders	<ul><li>Elongated, triangular shaped head</li><li>Neck appears long and thin</li></ul>
Body and legs	• Appear long and lanky

Subadults are small bears under 5 years old that are not yet fully grown, as indicated by the graph below. Two or three bears sighted together may be cubs accompanying a nearby female or siblings recently pushed out on their own by their mother. Cubs or females accompanied by cub(s) are not legal game.



<sup>\*</sup> Skull sizes represent bears harvested from Units 24 (Interior) and 6D (Coastal)



Subadult: notice triangular shaped face, large ears and long, lanky appearance.



Subadults traveling together.



Subadult male: notice long legs and lanky appearance.

### **Identification Quiz**



#1

# Male or Female?

Same bear, different angles



**Answer #1** Adult female

### **Clues:**

Narrow head, face and shoulders, front legs appear to taper to narrower ankles.



### Male or Female? Same bear, different angles



**Answer #2** Male

### Clues:

Wide head and face, thick muzzle, muscle bulges create a visible "valley" down the middle of forehead, shoulders wider than head, thick legs.

### Before you take the shot consider

Consider		Do NOT shoot if
Sex ID	• Have I watched the bear long enough to ID the sex?	<ul><li> A cub is present.</li><li> It is illegal to shoot a sow with cub.</li></ul>
Shot Distance	• Am I within range of my practiced ability?	<ul> <li>Shot is beyond my practiced ability.</li> <li>Too far away to ID the sex of the bear or see any offspring.</li> </ul>
Clear Shot	<ul> <li>Can I clearly see the target and what is beyond?</li> <li>Do I have a clear shot at the vital zones?</li> <li>Is the bear in a position/ location where I can take a follow up shot?</li> </ul>	<ul> <li>Bear is obstructed by trees, brush or rocks.</li> <li>Can't see beyond the target or the target is skylined.</li> <li>Bear is running or swiftly moving.</li> <li>No clear shot of vital zones: heart/lung.</li> </ul>

### Improve your chances of harvesting a male

- Get as close as safely possible.
- Be patient.
- Take the time to study the bear's physical characteristics.
- Use good optics.

### Adult male characteristics

Consider these criteria as a general checklist. Go through each characteristic to see which ones apply to the animal you are observing.

### Head and Neck:

- Ears appear small compared to rest of head and are set wide apart
- Wide, square head and face
- Thick, blocky muzzle
- Muscle bulges on top of head to create a visible "valley" down the middle of the forehead

### **Body Size and Shape:**

- Legs appear long and massive all the way through thick ankles and wide feet
- Massive shoulders wider than head
- Legs, rump and mid-section appear bulkier than females

### **Urination Posture:**

- Urinates straight down or forward
- Penis sheath is almost always visible in the fall and generally visible in the spring.



Adult male urinating

# Adult female characteristics

### Head and Neck:

- Ears appear small compared to rest of head
- Smallish, narrow head
- Tapered muzzle

### **Body Size and Shape:**

- Narrow shoulders same width as head
- Legs appear shorter, thinner and more tapered than male's legs
- Appear to be built close to the ground because of shorter legs

### **Urination Posture:**

• Urinates out and toward the rear



# Subadult characteristics

- Triangular shaped head
- Ears appear large
- Long, lanky appearance
- May travel with other bears



There are exceptions to every rule. Remember to stop and take a closer look.

# Making a clean kill

#### Prevent wounding loss

Before a hunter shoots, it is his or her responsibility to be sure they can make a clean and accurate shot. In many locations, a brown bear wounded by a hunter counts as the bag limit for the regulatory year. 'Wounded' means there is sign of blood or other sign that the bear has been hit.

#### Proper caliber

How accurately you shoot is just as important as the type of rifle, cartridge, and bullet you choose. If you intend to hunt brown bear in Alaska, use the most powerful rifle you can accurately and consistently shoot. Many hunters use a .338 or .375 but a .30-06 loaded with 200- or 220-grain Nosler<sup>®</sup> or similar premium bullet will do the job with good shot placement.

#### Shot placement

Carefully sight in your rifle so you are capable of placing a shot in the vital zone. ADF&G recommends a shot broadside and center of the shoulder. This placement has a high likelihood of resulting in a clean kill or disabling hit. Brown bears can be difficult to kill. Make the first shot best, then use rapid follow-up shots. A person with a backup rifle may help ensure the bear does not escape or run for cover.



For more information visit: www.adfg.alaska.gov/index.cfm?adfg=hunting.general



# Adult or Subadult?



Answer #3 Subadult

#### **Clues:**

Long thin legs, lanky appearance, triangular shaped head

**Hunting Tip:** The Hunt Alaska book is an excellent resource and is available by mail, online at hunt.alaska.gov or at area offices.



**#4** 

# Male or Female?



The distance was too far to accurately identify the sex of the bear. Get close, be patient and use quality optics.

#### Answer #4

Young adult female with cubs

#### **Clues:**

Smallish, narrow head and muzzle, thin, tapered legs

**Hunting Tip:** Quick shots can result in shooting an animal with offspring. Cubs are sometimes bedded down or up in a tree. While walking or feeding, a cub can be obscured by vegetation or topography. Patience is critical!





# Which is the male? Which is the female?





**Answer #5** Top Photo: Female Bottom Photo: Male



# Male or Female?



#### **Answer #6** Male

### **Clues:**

Wide, square head and face, muscle bulges on top of head to create a visible "valley" down the middle of the forehead, long legs.

**Hunting Tip:** Practice shooting the same weapon that will be used on your hunt at a rifle range as well as in the field, especially during the weeks leading up to your hunt. Good shot placement is critical.



### Male or Female?



#### **Answer #7** Female

# **Clues:** Narrow head, face and shoulders

**Hunting Tip:** It's hard to determine the size of a solitary bear at a distance. Use a good quality spotting scope.



### Male or Female?



#### Answer #8

Be patient and wait until the bear moves into the open before taking the shot. This bear is an adult male.

#### Clues:

Blocky head and face, wide shoulders and thick legs.

**Hunting Tip:** It is essential to have a clean shot. When shooting through thick brush, the twigs may deflect the bullet trajectory causing injury to the bear, rather than making a clean kill.



### Male or Female?



Answer #9 Large adult male

#### **Clues:**

Ears set wide apart, wide head, shoulders wider than head, legs thick all the way through ankles.

**Hunting Tip:** Use a weapon that has been carefully sighted in and practice using a range finder to assist in determining the distance between you and the bear.

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To learn more about hunting and general brown bear information, go to **www.hunt.alaska.gov**. For information about this publication, please contact the Division of Wildlife Conservation Area Office at 907-465-4265.

