



HUNT ALASKA



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Hunter Information and Training

Welcome to Alaska

Dear Hunter,

Whether you dream of hunting brown bears in southeast Alaska's coastal rainforest, Dall sheep in one of Alaska's many mountain ranges, or caribou on Alaska's tundra, Alaska offers some truly incredible hunting opportunities.

The key to a successful Alaskan hunt is careful and thorough planning and preparation. Hunting in Alaska can be a very different experience than hunting in most other states. The mystique of Alaskan hunting is well earned. The country is vast, the wilderness remote, the weather unpredictable, and the game animals magnificent. Animals such as the barren-ground caribou, muskox, Dall sheep, Kodiak brown bear, and Alaskan moose provide hunters with memorable experiences to last a lifetime. However, these uniquely Alaskan animals are not found in every part of the state. Even when they are abundant by Alaska standards, their population densities can be low compared to population densities of deer or elk in other states.

As you focus on what and where you want to hunt, I encourage you to take time to look at the statewide and specific regulations associated with the areas you intend to hunt and the species you intend to pursue. Information is available in the Alaska Hunting Regulations. Every year the Alaska Hunting Regulations are updated and available to the public by July 1.

We have prepared this guide to assist you in planning a safe and successful Alaskan hunt – however you define success. We highly recommend you complete the worksheets provided to help you plan for your hunting adventure. Remember that planning also includes physical and mental preparations for difficult weather, rugged terrain, and remoteness unlike anything you may have previously experienced.

Finally, we have included a list of contacts for you if you need further assistance in planning your expedition. If we can help with answers to questions about regulations or other issues, we would be pleased to do so.

Best wishes for a safe and memorable hunt.

Sincerely,



Doug Vincent-Lang
Director of Wildlife Conservation



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and Training**



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Know Alaska's Regulations

Every hunter has the responsibility to know the current year's regulations. Do not depend on a friend, guide, or family member to know the regulations. Regulations may change from year to year. You are personally responsible for knowing and following all the regulations affecting your hunt.

Alaska Hunting Regulations

The Alaska Hunting Regulations handbook is printed annually in June. The handbook contains information on general seasons, registration hunts, and bag limits. The handbook provides information on the kind of tag (e.g., harvest, registration, Tier II permit) you will need to take game. In the handbook you will also be able to find which hunts are open to nonresidents or residents only.

General Season Hunts

If you hunt in a general season hunt (e.g., a hunt that is open to an unlimited number of hunters), you will need a harvest ticket. Most harvest tickets are available at no cost where hunting licenses are sold to Alaska residents. Non-residents are required to possess a big game tag for the species they are hunting with fees ranging between \$150 - \$500. Some remote rural areas may not have licenses available or the vendor may run out of harvest tickets. Be sure to purchase your license and game tags, and pick up harvest tickets, before you leave home or a population center.

Registration Permit Hunts

In some areas, a combination of accessible animals and hunter demand could result in overharvest of a species and/or a high density of hunters. In these areas, managers may offer registration permits. In a registration hunt, you will have to sign in or register before you hunt a specific species in a particular area. Managers often set a goal for the number of animals that can be taken during a registration hunt. When this goal is reached, registration hunts can be quickly closed down. You should consult the area biologist about the hunt conditions and requirements of the permit before deciding to go on a registration hunt.

Drawing Permit Hunts

When a population of animals is too small and/or the potential number of hunters too large to allow a general season or a registration hunt, the Alaska Department of Fish and Game (ADF&G) may offer drawing permits. A Drawing Permit Hunt Supplement is published in the Fall. The drawing for permit hunts are held in November / December, and everyone who applies will be notified of the results by mail or can look up the results on ADF&G's website.

The Supplement contains all of the drawing hunts, by number, for all big game species. Most of the drawing permit hunts are open to both resident and nonresident hunters. A hunter may apply for three drawing permit hunts for each species. A fee is charged for each separate hunt. You can pick up a Supplement at any ADF&G office, on the website, or at license vendors.

Tier I and II Subsistence Permit Hunts

Tier I and II subsistence permits are available to residents only. A subsistence permit may be issued when there is not enough game for a general season and the population of animals has historically been an important source of human food. The application process for Tier I and II hunts can be complex. A Tier I & II Supplement is available that lists species, application dates, hunt dates, Game Management Unit (GMU), and hunting specifications. For more information, see Cultural and Subsistence Harvest Permits.

Federal Hunts in Alaska

The federal government regulates hunting on some federal public lands because of differences between state and federal laws relating to subsistence use of wildlife. Regulations shown in the current Alaska Hunting Regulations are the best authority regarding hunting on state and private lands. On some federal public lands, federal regulations may be more restrictive than state regulations covering the same area. Federal hunting regulations can be obtained from Alaska Public Lands Information Centers.



Transporting Firearms

When planning your hunt, be aware of possible rules and regulations relating to transporting firearms. State firearm laws and regulations that relate to hunters in Alaska are simple and pragmatic. Carrying hunting rifles and shotguns through Canada is not generally difficult.

Firearms in Alaska

In Alaska, hunters may generally possess and use firearms with few restrictions. State law prohibits the following:

- ⊕ Fully automatic firearms
- ⊕ Rifles with a barrel less than 16"
- ⊕ Shotguns with a barrel less than 18", and
- ⊕ Rifles or shotguns less than 26" in total length

Rifles, shotguns and handguns are legal for hunting in Alaska. Rimfire cartridges generally may be used only for small game. See the Alaska Hunting Regulations for details.

Alaska's laws do not prohibit anyone 21 or older who may legally possess a firearm from carrying it concealed. A special permit is not required.

Firearms carried in vehicles must either be in plain sight or, if concealed, out of reach of vehicle occupants. As a precautionary safety, firearms being transported to or from the field must always be unloaded.

State law prohibits shooting on, from or across a road. As a matter of safety and courtesy, hunters should discharge firearms well away from roads.

There are firearm restrictions in certain national park units. For current information about firearms in these areas, contact Alaska Public Lands Information Centers.

Firearms in Canada

When crossing the border into Canada, remember that you are responsible for declaring all firearms in your possession. Declared rifles and shotguns generally may be carried through Canada while in transit to Alaska. Certain types of handguns are not permitted in Canada under any circumstances. Other handguns may be carried into Canada provided that you are permanently moving to

Alaska. U.S. citizens may find it helpful to register firearms with U.S. Customs before traveling through Canada in order to prove ownership.

For more information on carrying firearms into or through Canada, contact the Canada Firearms Center at 1-800-731-4000; request Extension #9026 if you will be entering Canada at the Alberta border and Extension #9530 if entering from British Columbia.

Alaska Land Status & Access

A hunter has the personal responsibility to make sure he or she can legally hunt in their chosen area. Alaska has large areas of public land that are open to hunting. The state and federal governments own the public lands. Most national parks are closed to hunting, although some of the lands in Preserves administered by the National Park Service are open to hunting. Some Alaska National Parks are open to hunting by qualified rural Alaska residents. Nearly all National Wildlife Refuge, National Forest, and Bureau of Land Management lands are open to hunting.

Many good hunting areas are privately owned. Every individual hunter must get permission from the landowner to hunt on private property. Alaskan native regional and village corporation lands are privately owned, and may charge a fee to enter and hunt on their lands.

Along Alaska's road system much of the land is privately owned, especially near cities, towns and villages. You are responsible for finding out the land ownership of any property you may wish to hunt. Please note that if you will be hunting with a guide or using the services of a transporter, they should have a good working knowledge of land ownership in the area where you will be hunting. You are ultimately responsible for knowing the status of the land where you will be hunting.

If you hunt public lands and need maps showing public property boundaries, see the back cover of this booklet for the phone number and address of the Alaska Public Lands Information Centers.

Selecting a Guide

When hunting brown/grizzly bears, Dall sheep or mountain goats, hunters who are not residents of Alaska must be accompanied by a licensed Alaskan guide or they must hunt with close relatives within the second degree of kindred who are Alaska residents. The Alaska Hunting Regulations contains a list of relatives who qualify as second degree of kindred. Nonresident alien hunters (not U.S. citizens) must be accompanied by a licensed Alaskan guide to hunt any big game animal.

Improve the Chance of Finding Game

The chances of taking an animal improve if one hires a guide or travels to remote areas. Individuals who lack a precise knowledge of game distribution, access and Alaska geography, yet attempt to put together hunts themselves, may face frustration and disappointment.

On the other end of the scale, is the fully guided hunt. It is expensive, but the chance of taking an animal is high. The best guides experience 80 to 100 percent success for most big game species. In addition, guides are familiar with their areas and possess equipment that the average hunter might not care to purchase for a one-time hunt.

However, a guide's knowledge, experience and equipment do not come cheaply. Although figures vary from guide to guide, expect to spend \$8,000 to \$12,000 for a brown/grizzly bear hunt, \$8,000 to \$12,000 for a sheep hunt and \$6,000 to \$10,000 for a goat hunt. Moose and caribou are often part of a mixed-bag hunt and prices vary considerably.

The Best Way To Find A Reliable Guide Is To Check Their References

Check among your hunting partners. Have any of them hunted in Alaska before? Do they know someone who has previously hunted in Alaska? Which guide did they use?

Many guides attend outdoor shows and conventions in the "Lower 48" during the winter. They have booths and promotional materials. Try to attend one of these events to make personal contact with potential guides. This kind of personal acquaintance will pay dividends later. Ask the guides for references and follow up on them.

Another source for locating guides is the advertising section found in the back of many hunting and outdoor magazines, or in commercial directories. Advertisements offer a starting point for identifying guides that specialize in the species or area in which you are interested.

A list of licensed Alaska guides is available from the Division of Occupational Licensing (see back cover for address). The list includes guide-outfitters, assistant guide-outfitters, and the areas for which they are licensed to operate. Another source is the Alaska Professional Hunters Association, which represents many guides and outfitters, (907) 264-6619.

Hunter Education in Alaska

Hunter education certification is a good investment. Certified hunters are involved in fewer accidents and less frequently violate hunting laws and regulations. Everyone benefits from this training, and we recommend it for all hunters. The training is available all across North America from volunteer instructors certified by state or provincial wildlife agencies. Hunter education is required to hunt in some areas of Alaska; consult the current Hunting Regulations for requirements. For more information about certification or training, contact the Alaska Department of Fish and Game, Hunter Information and Training Program in Anchorage, (907) 267-2187.

Alaska does not require wearing hunter orange clothing, but investigators consistently have found it reduces hunting accidents. Hunter orange also helps you keep track of partners in the field.



Fly-In Hunting

It is expensive to build and maintain highways in Alaska's mountain ranges, muskeg, tundra, and forest. Therefore, very little of Alaska is accessible from the limited road system. Residents heavily hunt the road system. It is not a good idea for a non-resident, unfamiliar with the country, to try and save money by hunting along the road system. For example, less than one in 20 non-resident hunters who use the road system for hunting access will be successful for moose.

If you are not an experienced Alaskan pilot, you should not consider using your own plane for hunting in Alaska. Alaska's weather is frequently bad during the prime hunting season. Strong winds, heavy rain, snow, and fog are common in most areas. Many landing "strips" are small, shallow lakes or simply a short area temporarily cleared of enough brush to land a "bush plane."

To Reach the Alaskan Backcountry Most Hunters Use Guides or Air Charter Operators

Non-residents may hunt moose, caribou, deer and black bear without a guide. Many hunters choose an air charter to fly into prime hunting areas to hunt these species. The air charter operator is licensed by the state to charge for flying hunters and their game meat.

The drop-off hunt is less expensive than a guided or outfitted hunt because the air charter provides only transportation. Some charter operators may throw in some planning tips. The hunter provides all of the camp gear and performs all other functions on his own.

While most charter pilots spend little time on the ground in prime hunting areas they do fly over these areas regularly and often have a good idea of game populations, access points, and hunting pressure. Before you contract with an air charter operator you should have a clear understanding of the costs of services and know exactly what services to expect. Prices and services vary considerably. To avoid confusion and disagreements, ask specific questions about the charges and what services are included.



Air Charter Operators May Charge a Flat Rate or by the Hour for Flight Time

When calculating costs on an hourly rate, you have to take into account "dead-head" time, the time the pilot spends flying back to base after dropping you off and the time spent flying out to pick you up. For example, if it takes one hour to fly to your hunting area, your round-trip cost will be four hours (an hour in, the hour for the pilot to return home, an hour for the pilot to get back to you and an hour to get you home).

Therefore, if you are quoted a price of \$250 per hour and the area you wish to hunt is approximately an hour from the charter operator's home base you will pay about \$1,000 for being dropped off and picked up. Remember, you are chartering the entire plane and more than one hunter may be able to share the ride and split costs. If you and a friend hunt together the cost of the example would then be \$500 per person. Be aware that planes cannot be overloaded and fly safely. If you and a partner both take caribou or moose you may need an extra trip to get the meat out. If you have contracted by the hour, the costs can quickly add up.

Make Sure to Find Out Whether Meat Hauls Are Included in a Flat Rate

Air charter operators often offer "package" or "flat rate" deals. In the package or flat rate system you pay a single fee per person. Again be sure to ask whether the package includes flying out the meat and antlers. Package and flat rate fares are a bit of a gamble for the operator and the hunter. The operator comes out ahead if the game is nearby

or if you are unsuccessful. On the other hand, the hunter tends to find flat rates a good deal when the animals are further away than expected or if he is successful. Some package deals also include being checked on at least once during the hunt to bring out game or move you if you haven't been successful. Charter operators may have many hunters in the field at one time. There are tales of charter operators forgetting a hunter for several days before remembering to pick them up. Make sure your pick-up date is confirmed with the pilot or charter operator and also recorded on the hunt plan that you leave with friends or family (see hunt plan, page 51).

If you accept a flat rate, ask the pilot if it includes time to scout the hunt area. Most hunters like to look at the terrain from the air and perhaps spot game before landing. Generally, you may not take big game on the same day you have flown (commercial exempted airlines are accepted). See the Alaska Hunting Regulations for species and seasonal exceptions). If you charter on an hourly basis, you can scout as long as you can afford it. However, be aware that flat rates often do not include much scouting time.

The Cost of Air Charters Also Depends on the Size of the Plane and the Number of Hunters Sharing the Cost

If you fly-in on a Beaver with floats, the cost per hour may be up to \$400 or more, however this plane can haul around 1200-pounds, including passengers. A Super-Cub may cost half that amount but only be able to carry one hunter and about 60-pounds of gear. Make sure you explain the number of hunters in your group and the amount of gear you will have.

Place all your gear in soft-sided containers or bags when you pack for a fly-in hunt. Hard-sided bags or rigid containers are more difficult to pack in a plane and take up valuable space.

Remember that it is essential for you to ask the right questions. Air charter operators can provide you with a great experience or a disappointing hunt. Some high volume air charter operators depend on having many new non-resident hunters each year and have been reported for dropping off hunters in unproductive areas. Ask for recent references over the past three years. Call every reference and ask about their experiences before you send a deposit

Plan Ahead

Thorough hunt planning takes lots of time. For some species like sheep and brown bear allow 12-18 months. For other big game, allow six to nine months to reserve your preferred dates, call references and finalize any contracts you may need.

More Fly-In Hunt Tips. . .

- ⊕ There are two ways to approach a drop-off hunt: (1) Select a specific site and ask the pilot to take you there, or (2) You can choose a general area and ask the pilot for a good hunting spot within that area.
- ⊕ In most areas, there are competing air charters. Even if the competition only flies in one group per area, there still may be three or four camps in one location. There may also be some resident hunters with their own aircraft.
- ⊕ If crowding is of concern to you, let the pilot know. He probably has some alternate locations. Some pilots refuse to take more than one party at a time to a given area. Air charters are only as good as their reputations, and those reputations are built on happy clients. If you hunt in a crowded area, it is likely that game is abundant there. Certainly, there are places where you are unlikely to see another hunter, but game may be scarce. Again, your choice of areas will depend on your definition of success.
- ⊕ Unless prior arrangements are made with air charter operators, you will remain in the same place until pickup time. The smart hunter makes firm arrangements to have the pilot check on him every few days. Remember, if you decide to move your camp, there may be additional flying costs.
- ⊕ You need to know the payload capacity of the particular aircraft you are using. Depending on the aircraft, the number of hunters and the amount of equipment, extra flights may be necessary to get everything out if you kill a big game animal. Some flat rates include meat hauls while others do not. Avoid the temptation to overload an aircraft just to get everything out in one trip. Overloaded aircraft are a significant

cause of hunting-related crashes. Over-limit payloads are not only dangerous, they are illegal.

⊕ If you have made arrangements with the pilot to check on you every few days, it may be possible for him to fly out your meat early. If the pilot is on his way home from some other trip, you may be able to save some money. Make sure you have a prearranged signal so the pilot clearly understands whether you want him to land at your location to move your camp or haul out meat.

⊕ Cost is only one consideration when dealing with meat. If you are on an extended hunt, particularly early in the season, meat spoilage is a serious concern. Most air charters have access to some sort of meat storage facilities. By having the pilot check on you periodically, you can get your meat out of the field before it spoils.

Estimating Aircraft Capacity

You are told the aircraft has a payload capacity of 1,200-pounds. Say each person weighs an average of 200-pounds. There are three hunters and the pilot: 800-pounds. Therefore, each hunter can carry 130-pounds of gear, including guns, food, clothing, camping equipment, etc. This does not include the meat and antlers you might bring out.

It Is the Hunter's Responsibility to Salvage All Edible Meat and/or Hides, and Skulls

It is the legal responsibility of the hunter—not the air charter operator—to salvage all edible meat and/or hides and skulls as outlined in the regulations booklet. Non-residents are often accused of wasting game meat. Wasting game meat is a very serious offense in Alaska. It is your responsibility to learn how to properly field dress an animal and care for the meat and bones in certain GMUs.

When planning your hunt, keep the weather in mind. Besides making your hunting miserable, poor weather may disrupt your flying plans. Allow time on both ends of your schedule for weather disruptions, which are often frequent during Alaska hunting season.



If there is some reason you absolutely, positively have to be somewhere on a certain day immediately following your fly-in hunt, don't go on the hunt! If a delay in your pickup will cause a major inconvenience, schedule your pickup a day or two earlier. Don't push your schedule to the last minute. There are too many variables in flying to remote portions of Alaska.

Don't even think about pressuring your pilot to fly if he thinks that the weather is not good enough. Being on time is not worth the risk of dying.

While the potential pitfalls of a fly-in hunt are many, so are the rewards. For the non-resident hunter who plans carefully, does his homework on where and what he wants to hunt, and makes firm arrangements with a reputable air charter operator, the fly-in hunt can indeed fulfill the dream of a lifetime.

There are also a few transporters who will take you into the backcountry on horseback. But their number is only a fraction of what you find in many of the other renowned big game hunting states in the West. More common are boat operators (mainly in coastal areas) who will provide drop-off transportation. Many of the same safety principles apply to boat trips as aircraft.

A list of licensed transporters is included with the guide list. Similar information is also available in commercial directories, see the back cover.

Certified Air Charter Operators

The Federal Aviation Administration and the State of Alaska must certify all air charter operators. Long-established operators become well-known in their areas of operation. Ask the air charter operator for references.

Lodging Accommodations

Overnight hunting accommodations can vary from a small tent on the side of a mountain to deluxe wilderness lodges with more comforts than home. Some Alaskan guides maintain first-class hunting lodges in good big game country. Other operators provide fine lodging without a guide. Some provide weather-tight cabins with few luxuries.

The state and federal governments maintain public use cabins, especially in Southeast and Southcentral Alaska. These cabins are fairly primitive. They may have plywood bunks, a wood

or oil stove (check in advance as to which is available in your cabin), a table and benches, and a nearby outhouse. Users should bring their own food, cooking equipment, fuel, water, bedding and amenities. Check directly with Alaska State Parks, the U.S. Department of the Interior/Bureau of Land Management, the U.S. Fish and Wildlife Service, and U.S. Forest Service for current information on available locations, access information and restrictions, reservation policies, and rental expense.



Contact	Alaska State Parks	Bureau of Land Management	U.S. Fish and Wildlife Service	U.S. Forest Service
Location	Nancy Lake (Wasilla) Kachemak Bay (Homer) Caines Head (Seward) Chena River (Fairbanks) Shuyak (Kodiak) Southeast Alaska	White Mountains National Recreation (north of Fairbanks)	Kodiak National Wildlife Refuge (Kodiak) Tetlin Wildlife Refuge (Tok)	Tongass National Forest (Southeast) Chugach National Forest (Prince William Sound area)
Access & Restrictions	Discharge of firearms is not permitted near most of these cabins.	Best access is during the winter months.	Cabins are accessible by boat or float plane.	Most cabins are accessible only by trail, boat or aircraft.
Reservation	Fee required. Reserved up to 180 days in advance by mail & confirmed when paid in full.	Fee required. Reserved up to 30 days in advance by mail or phone & confirmed when paid in full.	Fee required. Reserved by lottery only, drawn three months in advance.	Fee required. Depends on location, but can be reserved in advance. Some cabins have a three-day limit.
Cabins (Fees are subject to change)	Sleeps 3-8; equipped with wood stove (for heat), table/chairs, and sleeping platforms	Sleeps 6-8; wood stove (for heat), table/chairs, and sleeping platforms (cabins will vary)	Cabins include kerosene heaters (no fuel); (cabins will vary depending on location)	Sleeps 4-16; equipped with stove, table/chairs, and sleeping platforms (cabins will vary)

Navigation Equipment

Much of Alaska has no roads or any man-made structures. Vast areas may look the same, such as the northern boreal spruce forest, the tundra plains, or the mountains where weather may further impair a hunter's sense of direction. When visibility is poor, most humans lose their sense of direction. Even when visibility is good, hills, valleys, and forests may confuse a hunter whose attention is concentrated on finding or tracking a game animal. Hunting in Alaska requires navigation skills to find your way to and from camp. Therefore, it is important to learn basic map and compass skills before venturing into the Alaskan wilderness.



Topographic map, GPS, and compass

Topographic Map

Every hunter in Alaska should carry the largest scale topographic maps of the specific and surrounding area they will be hunting. A common scale map for hunters is 1 to 63,000, where one inch equals one mile. These topographic maps are accurate and show details such as elevation and types of land (mountains, swamps, forests, and man-made structures). Topographic maps may be ordered from the U.S. Geological Survey or from businesses that offer services to backpackers, campers, and hunters.

Compass

Every hunter should also carry a quality liquid-filled compass and know how to use it to lay out a base line and navigate to and from camp. A hunter skilled in map reading and compass use can safely navigate to and from camp, even in fog, rain, or snow.

Global Positioning System (GPS)

An increasing number of hunters take a Global Positioning System with them into the field. A GPS relies on a number of satellites to locate the user. The hunter can use the “way point” feature to mark the location of camp, and the location of the animal he or she has taken. The GPS can be used to navigate between these marked “way points.” The “way point” feature can be especially valuable to hunters when they have to make multiple trips to pack out game meat. While the hunters are packing

out meat a bear may find the kill site and claim the carcass. If the hunters are using a GPS they can be very cautious as they return to the site and prevent a possible confrontation with a bear. Keep in mind it is illegal in Alaska to kill a bear to keep it from eating your game animal.

Just like a map and compass, a GPS requires knowledge, practice and experience to use. Hunters should remember that a GPS must be able to “see” the sky to locate the satellites. If you find yourself under trees or in a deep mountain canyon the GPS may not work. A GPS operates on batteries that may fail when you need it the most, and are heavier and more expensive than a map and compass. Simply put, GPS is not a substitute for a good map, compass and navigational skills.

You cannot master basic navigation skills by reading a book on the subject. Safe and responsible hunters can find assistance in mastering basic navigation skills by calling the Alaska Department of Fish and Game, Hunter Information and Training Program. The program’s hunter clinic series offers training in basic navigation skills. Several businesses also offer basic and advanced training in navigation skills. Many outdoor clubs offer orienteering training. If you cannot attend a clinic or course, find an experienced hunter or backpacker who can help teach you the basic navigational skills necessary to become a confident, self-sufficient hunter in the wilderness.

Choosing a Firearm, Cartridge and Bullet

How accurately you shoot is more important than the type of rifle, cartridge, and bullet you choose. Alaska has some very large game animals, including 1,600-pound mature bull moose and 1,500 pound coastal brown bears. Moose or brown bear hit in the gut with a large caliber magnum rifle such as the popular .338 Winchester®Magnum is wounded and just as likely to escape as if it had been hit with a small caliber rifle such as the .243 Winchester®. The bore size, bullet weight, and velocity are of secondary importance to precise bullet placement in the vital heart-lung area.

It is important for the hunter to have a good knowledge of game anatomy, the skills needed to correctly judge distance, the discipline to take only shots that can be made with certainty, and the ability to shoot accurately from sitting, kneeling, and standing positions. As long as the caliber is reasonable and a quality bullet is used, hunters kill game quickly and humanely with precise bullet placement.

Select a Quality Bullet

If you presently own a rifle chambered for the .270 Winchester® 7mm-08, .308 Winchester® or .30-06 and can place all of your shots in an 8-inch circle out to 200-yards from a sitting or kneeling position you can be a successful Alaskan hunter. To be as effective as possible, these cartridges should be loaded with premium quality bullets such as the Nosler Partition®. If hit in the heart-lung area with a 180 grain Nosler Partition®, fired from a .30-06, the bullet will pass completely through a mature bull moose, interior grizzly, or black bear.

Big Magnums Not Needed

Because of the presence of brown and grizzly bears many hunters have been convinced that a .300, .338, .375, or .416 magnum is needed for personal protection and to kill large Alaskan game. This is simply not true. The recoil and noise of these large cartridges is unpleasant at best and plainly painful to many shooters. It is very difficult to concentrate on shot placement when your brain and body remembers the unpleasant recoil and noise that occurs when you pull the trigger on one of the big magnums.



Winchester (left to right): SUPER X: POWER-POINT® .308 Win 150-Grain, .300 Win Mag 180-Grain, POWER-CORE 95/5™ .300 Win Mag 150-Grain

The two most common complaints of professional Alaskan guides are hunters who are not in good physical condition and hunters who cannot accurately shoot their rifles. Lack of accuracy results from too little practice shooting their hunting rifles from positions such as sitting, kneeling and off-hand (standing). Hunters miss their best chance at taking their dream animal or worse yet, they wound and lose an animal. Most experienced guides prefer the hunter come to camp with a .270 or .30-06 rifle they can shoot well, rather than a shiny new magnum that has been fired just enough to get sighted-in. If you are going to hunt brown bear on the Alaska Peninsula or Kodiak Island, a .30-06 loaded with 200 or 220 grain Nosler® or similar premium bullet will do the job with good-shot placement. Only consider using a .300, .338 or larger magnum if you can shoot it as well as you can the .30-06.

It is very popular now to purchase large magnum rifles equipped with a muzzle-brake. Most muzzle-brakes are very effective at reducing recoil. A .375 magnum with a muzzle-brake recoils much like a .30-06. Before you are convinced that you should use a muzzle-braked rifle in Alaska, you should consider its disadvantages.

A muzzle-brake increases the muzzle blast and noise to levels that quickly damage the ear. Even when just sighting-in or practicing, everyone near you at the range will find the blast and noise bothersome. Anyone near the muzzle-brake when the rifle is fired may suffer hearing loss or physical damage to the ear.

It is not practical to wear earplugs or ear muffs

when you are hunting and neither can your hunting partners or guide. An increasing number of guides will not allow a hunter to use a muzzle-brake because the danger of hearing loss.

Rifle Weight Reduces Recoil

Rather than rely on a muzzle-brake to reduce recoil, use a rifle heavy enough to reduce recoil. If you are planning on packing out moose meat, caribou meat, or a brown bear hide weighing hundreds of pounds, you can carry a 9 - 11 pound rifle including scope. A rifle of this weight in .300 or .338 magnum can be mastered with a lot of practice. You can also avoid using a muzzle-brake by selecting a cartridge that you can shoot comfortably and enjoy shooting enough to practice often. For most hunters, the upper limit of recoil is the .30-06 or 7mm Remington Magnum®. A majority of hunters are more comfortable with a .308 or .270.

What Type of Action Should You Use?

If you are choosing a rifle for Alaskan hunting you should strongly consider a modern bolt action rifle made of stainless steel bedded in a synthetic stock. The Browning A-Bolt® and Savage® 116 are excellent examples of all-weather Alaskan rifles. The bolt action is recommended because it is mechanically simple, can be partially disassembled in the field for cleaning, and is the most reliable action under poor weather conditions. Stainless steel is excellent for most Alaska hunting because it resists rust caused by rain or snow. Stainless steel will rust in time and like any fine tool, must be maintained after each day of field use.

Round-Nosed or Pointed Bullets?

A high quality rifle bullet, placed into the heart or lungs of a big game animal at approximately 2,000 to 2,800-feet per second will expand or “mushroom” and destroy the vital organs. The shape of the bullet has no direct effect on its function, its accuracy, or its ability to kill. A “round-nosed” bullet that penetrates and destroys a vital organ is just as effective as the most streamlined of bullets.

However, a pointed bullet does not lose velocity as quickly as a round-nosed bullet. For example, a .30-06 firing a 180-grain pointed bullet, which leaves the barrel at 2,700-feet per second, is travelling 2,300 feet per second at 200-yards. In comparison, a round-nosed 180-grain bullet at the same speed will have slowed to 2,000-feet per second at the

same distance, because the pointed bullet can cut through the air with less resistance just like a sleek fighter jet. Under actual field conditions bullet shape will make no difference between a good hit, bad hit, or miss. At distances beyond 200-yards a pointed bullet will not drop as quickly as a round-nosed bullet. Most hunters should not shoot big game at distances further than 200-yards.

Quality is More Important than Shape

The bullet shape is not as important as the quality of the bullet and how well your rifle will shoot a particular bullet. Some rifles will shoot a pointed bullet more accurately and some will shoot a round-nosed bullet more accurately. You should try both pointed and round-nosed bullet shapes to determine the appropriate bullet weight and shape for your firearm.

Bullet Construction

A bullet must be “tough” enough to penetrate through skin, muscle, and even bone to reach the vital organs. It must also be “soft” enough to expand and disrupt the function of these vital organs. Through out the history of bullet making this has been the constant challenge: find the proper balance between “soft” and “tough”.

Modern bullets are typically constructed from a copper or copper alloy “jacket” that surrounds a lead or lead alloy core except at the very tip or “nose” of the bullet. Most conventional bullets have jackets that are thin near the nose and thicker near the base. This method of construction is designed to control the rate of expansion as the bullet will open or “mushroom” quickly toward the thin “nose” but will not “mushroom” as quickly near the base. Examples of this type of bullet are the Hornaday Interlock®, Speer Grand-Slam®, and Remington Core-Lokt®

The advantage of these bullets is that they are relatively inexpensive and work well on most game animals at ranges from 50 - 200 yards. At typical velocities, these are excellent bullets for almost any game. One can say with high confidence that a big game animal hit in the heart-lung vital zone with one of these bullets will die swiftly and certainly.

Construction of Premium Bullets

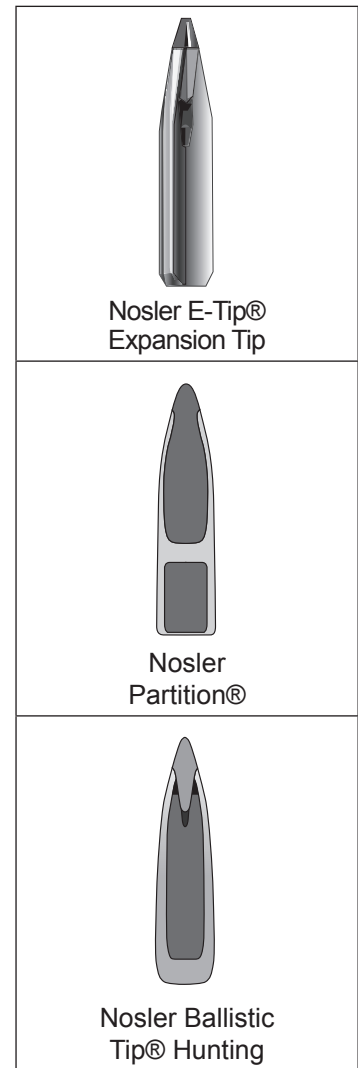
The next step in bullet construction and bullet complexity is the “partitioned” bullet. These include the Nosler Partition® and the Swift A-Frame®. These bullets all share a common feature. They both have a tapered jacket that is “H” shaped (see picture). The crossbar of the “H” is a part of the jacket itself. The front end of the “H” is filled with lead, a lead alloy, or tungsten alloy. These bullets are designed to expand quickly at the front but never expand below the crossbar of the “H.” In theory, this should be the best of both worlds. Excellent expansion to destroy tissue and a protected core that will insure deep penetration.

Another option is bonded construction where the jacket is chemically or heat bonded to the core. Bonded core bullets do not expand rapidly and therefore penetrate deeply. Trophy Bonded Bear Claw® bullets are a prime example of bonded core technology.

How Do These Bullets Work in the Field?

In a word, outstanding! They work about as well in real life as in theory. If a moose, elk, caribou, or even brown bear is hit in the heart-lung vital area, ultra-tough bullets frequently exit the opposite side, ensuring a double-lung hit and often leaving a blood trail. The only negative of these fine premium bullets is cost. A box of factory loads with Nosler®, Swift®, or Trophy Bonded® bullets typically cost twice as much as a box with conventional bullets.

To sum up firearm, cartridge, and ammunition selection you can't go wrong with a stainless steel bolt action rifle chambered for a standard cartridge loaded with a quality bullet.



How Much Performance Can You Stand?

“Modern... cartridges already burn more powder, make more noise and kick us harder than makes sense. The current trend to bigger brass borders on a collective obsession with brute force. I talked with one [hunter] who told me that a deer he'd shot from behind with a magnum cartridge had flipped end for end. He paused to let that sink in, as if flinging deer around like bowling pins was every man's passion. I'm afraid it was all lost on me. My measure of a hunt differs. Velocity, powder weight and bullet weight all contribute to recoil. Extra rifle weight will absorb some recoil. A well shaped stock and soft pad will help you handle recoil, but they won't diminish it. For that you need a muzzle-brake. The device tames kick but is bad medicine afield where you can't wear earmuffs. We needn't stop Panzers in the aspens; our bullets need only kill animals. I have never seen a well-hit elk stay on its feet for more than a few yards of travel.

Hard kicking rifles that are expensive to shoot commonly spend most of their time in the rack at home. You may not consciously avoid shooting powerful rifles, but you're less likely to shoot them often. Result: insufficient practice... Dead doesn't come in degrees. And a well placed bullet from a .30-06 cartridge or its kin kills game animals dead as far as most of us can hit with certainty on the hunt.

Hunters typically want to shoot farther than they have to shoot. Usually there's a way to get a close shot when you have a long one... If you routinely spook game your stalking skills need polish.

The 'fling an arrow before he gets away' philosophy leaves a lot of animals dying slowly back in the black timber. Hunting is not just a game. The animal isn't armor-plated and suffers greatly for a bad shot.”

Excerpted from, Wayne van Zwoll, "How Much Performance Can You Stand?" Bugle, July/Aug. 1998.

How Far Should I Shoot?

"The elk stepped clear of the aspens at about 400-yards. He was a grand bull, the one we'd come for. The hunter's rifle lay still across my spotting scope; the tripod already adjusted for his position. But he didn't shoot.

Why? Because 400-yards is a blooming long shot, that's why! Even with a .300 magnum on a solid rest, you'll seldom hit where you want to at 400 steps. But these days, the hills are full of hunters who say they routinely kill game at 400-yards. Are they daft or am I?

Except on flat, featureless terrain, we commonly guess long. Some hunters who claim long shooting have only their own estimate or the guide's as proof. It feels good to think we've shot long.

Of course, some hunters have made very long shots. Some of these fellows are exceptional marksmen. The rest have been lucky. My own records of guided hunters show that beyond 200-yards the probability of a fatal hit drops dramatically. Farther than that, there's only an even chance the hunter will hit vitals the size of a fruit basket. The few shooters who score consistently beyond the 200-yard mark can do it as handily with a .30-06 as with the latest super magnum.

Does that mean that hot-dog cartridges are worthless? Well, no. However, more powerful cartridges kick harder and make more noise, and if the hunter has trouble shooting them accurately, the somewhat flatter trajectory does them little good. A .30-06 or .308 will shoot flat enough for a "point blank" range of 250-yards if you zero at 200; besides, most big game is killed at ranges of under 200-yards, where you don't need more bullet speed.

Accurate bullet placement matters more than speed or energy at any range. Hunters shooting .270's and .30-06's can be deadlier than hunters with bigger rifles who have developed a flinch from blast or recoil. Within 200-yards ordinary cartridges have energy to spare for bullet expansion and penetration.

Shooting targets from a bench gives hunters a false sense of security because the support holds the rifle still. If you want to know how you'll fare in the field, get off the bench, jog to the 100-yard target frame and back again, then hastily get into a

hunting position and squeeze off one shot. Repeat 10 times. That group won't be as small as those you fired from the bench.

Remember, group size and placement both matter. Draw an 8-inch circle around the aiming point to represent the vitals. Then count the number of bullet holes outside the ring. Your maximum effective range, in my view, is that at which you can keep nine of 10 shots in this circle. It just makes sense to be 90 percent sure of a killing hit before pulling the trigger.

Effective range varies with your shooting position. Standing, I'm not much of a threat beyond 120-yards. Kneeling, with a sling, I'm dangerous to about 180. Sitting, I'll shoot to 250.

At 400-yards a rifle that shoots 2-inch groups at 100-yards (from a bench rest) is already scattering bullets over an area almost as big as the vitals area. Add a 40-yard error in range estimation (at 10 percent that's a small error; but your bullet drops twice as far between 300- and 400-yards as between the muzzle and 300). Add a slight muscle twitch, a little side pressure on the trigger, the thump of your heart at the wrong time...

And then there's the wind. The effect of wind increases dramatically with range. A modest 10 m.p.h. crosswind can push a .270 bullet 15-inches at 400-yards, but that same breeze moves it less than 4-inches at 200-yards. Unlike gravity, wind direction or speed cannot be predicted. At the target both direction and speed may be different than they seem to you at your position. Sudden gusts, let-offs, and direction changes can foil our attempts at determining wind, and that lethal bullet can skate off course like a Ping-Pong ball in the blast of a fan.

The key to more successful hunting isn't reaching farther with your rifle; it's knowing how far you can shoot effectively, getting within that yardage, and taking care with every shot.

Practice counts too, as my hunter learned when the bull we'd been watching drifted out of the timber 400-yards away and angled toward us. At 300-yards, in failing light, the animal stopped. 'Your call,' I whispered. 'I can do it,' he said and squeezed the trigger. Fourteen rounds later the bull died. Even 300-yards is a blooming long shot."

Excerpted from, Wayne van Zwoll, "Reaching Out," Field & Stream, Sept., 1999.

Firearm Maintenance

Home Care

A cleaning kit should contain a one-piece cleaning rod with a rotating handle. Use a pointed jag rather than a loop for patches. In the barrel, the tight-fitting jag and patch combination will remove more fouling than the loose fitting loop and patch. A kit should also have a bronze or brass brush, the same size as the bore. Along with a rod, jag and brush, your kit needs lots of correctly sized cotton patches as well as a bottle of bore solvent. (Shooter's Choice® and Hoppe's Copper® are examples of solvents that will remove copper and powder fouling.) Finally, a thin film of good lubricant such as Browning Gun Oil® or Tetra Gun Oil® is necessary to protect your gun after cleaning.

Cleaning a Rifle from the Muzzle May Cause Damage to Your Firearm

To clean your bolt action rifle, first remove the bolt from the receiver. Place the jag tip on the cleaning rod. Take a cloth patch and dip it in the solvent. Center the wet patch on the jag and run the patch-tipped jag through the barrel from the back of the barrel where you removed the bolt. (Note: Never clean a rifle from the muzzle end unless you absolutely have to such as with a lever, pump, or semi-automatic. You run the risk of damaging the rifling at the muzzle and may cause a loss of accuracy.) As the jag clears the end of the barrel the patch will fall off. Remove the rod from the barrel and repeat the process.

Replace the jag tip with a brush and push it back and forth in the barrel at least 10 times. This will help loosen the copper fouling. Remember to keep your hand on the handle so the rod can rotate with the rifling.

Next, replace the brush with the jag and a clean, dry patch. Then, push the rod through the bore of the rifle. Repeat this process using several patches until the cotton patch comes out clean. Lightly oil a patch—only a drop or two of lubricant—and place it on the jag. Run a lubricated patch through the bore. This will protect the inside of the barrel until you are ready to practice again or go hunting.

Finally, use a lightly oiled patch or cloth to wipe down all the outside metal surfaces of the firearm. If the firearm has been used in the snow, rain, or near salt water then separate the barrel and action from



Cleaning kit should contain: 1-piece rod, bore guide, jag tip, brass brush, cotton patches, firearm screw driver kit, and brass hammer.

the stock and wipe the internal metal parts with an oiled patch.

Field Care

Alaska is a land of weather extremes. If you hunt the coastal areas your firearms will be exposed to salt spray and high humidity and may rust in a matter of hours. Even stainless steel will corrode after exposure to salt water. If the internal parts such as the trigger mechanism or firing pin are exposed to salt water and humidity, they may not work when you need them. If you hunt in extremely cold temperatures your firearm may not fire unless all grease and oil have been carefully removed. These difficult weather conditions make it essential to keep your firearm in good working order.

Always Pack a Small Cleaning Kit When You Hunt

To maintain your firearms when you hunt, always pack a small container of light gun oil or lubricant, compact cleaning rod with a jag or loop, and plenty of cotton patches. Remember to take screwdrivers, allen or Torx wrenches that fit the screws on your gun, scope base(s), and rings.

Finally, pack a small roll of black electrician's tape to cover the muzzle when you are hunting to keep out dirt, debris, and rain.

Clean Your Rifle After Every Practice and Hunting Trip

After hunting each day, wipe all the metal surfaces of your gun with a patch containing oil or other lubricant. If you have been hunting in the rain or snow you should also run an oiled patch through the barrel. If it rains or your gun falls into water, you should remove the barrel and action from the stock and carefully wipe dry and then lubricate all metal surfaces.

Temperatures will affect your rifle. Never store your rifle inside a warm cabin or tent at night, or overnight in a waterproof gun case. In either situation condensation may form causing rust or fogging your scope. The best place to store your firearm in hunting camp is outside your cabin or tent, under a protective cover from rain or snow.

Sighting-In Your Hunting Rifle

Sighting-in is one of the most important parts of preparing for hunting season. The first step in sighting-in your rifle is to give it a thorough cleaning. A rifle's accuracy will often improve with a good, complete cleanup.

Once Cleaned, Check the Mechanical Operation of the Rifle to Make Sure that it is Operating Properly

Check and firmly secure the screws on the action, sights, scope mounts and scope rings. Next, the scope must be bore-sighted. Bore-sighting your scope and rifle will ensure that the first shots fired will be on the paper at 25- or 50-yards, and you will not waste ammunition. Most rifle ranges have a bore-sighting device called a collimator that you can use by following simple instructions. A gun shop or gunsmith may also be able to bore-sight your rifle for you.

Testing the Bore-Sight

If you cannot find a bore-sighter, then set up a bull's-eye target at 25-yards. Remove the bolt from the rifle and place the rifle on a solid rest. Look through the barrel and place the bull's-eye in the center of the barrel. Your eye will automatically center the smaller circle (bull's-eye) inside the larger circle (the barrel).

Now ease your face up until you can see through the scope. If the scope cross-hairs are centered in the bull's-eye then you will be able to hit close to the target. If they are not centered you should adjust the scope until the cross-hairs are centered in the bull's-

eye. When you are bore-sighting by this method you must move the scope adjustments opposite the direction you want the cross-hairs to move.

Select the Correct Ammunition

The next step is to select your ammunition. Most modern rifles will shoot bullets of medium weight with good hunting accuracy. In a .30-06 or .308 this means 165- to 180-grain bullets and in a 7mm look for 140- to 175-grain bullets. Many rifles prefer one brand of ammunition to another. If you can afford to, buy at least two different brands of ammunition and two bullet weights for sighting-in. When you find a brand that your rifle prefers use the remaining ammunition for practice.

Make sure you have and use hearing and eye protection. If you don't have an established range where you live make sure that you shoot against a backstop with no houses, roads, or other buildings within three miles down range.



For example, if your cross-hairs are low you will move the vertical scope adjustment screw in the direction that says *down*. If the cross-hairs are to the right of the bull's-eye you must move the horizontal adjustment in the direction that says *right*.

Use a Front and Rear Rest When Practicing with Your Firearm

Now your rifle is ready for sighting-in with live ammunition. Shooting ranges will have benches to sit at for sighting-in. If you do not have a range nearby use a small table. You must be comfortably seated for sighting-in. Place the forend of the rifle on a solid rest. Sand bags work well or a block of wood covered with an old towel will do. Never rest the barrel on the front rest.

You will also need a rear rest for the buttstock. Again, sand bags work well or a smaller block of wood with a rolled up towel on top.

The secret to accurately sighting-in is to build up a front and back rest to support your firearm without having to physically hold the rifle in place. Make adjustments to your rifle until the cross-hairs of the scope are centered on the target.

Place your front hand on the stock behind the front rest. Now carefully load a single cartridge. Move your body and the padding under the buttstock until the cross-hairs are again centered on the target. Breathe slowly and naturally. Relax and squeeze the trigger. Do not get up from your seat or move around. Try to stay as still as possible and fire two more shots.

Now you should have a “group” of three shots on the target that are fairly close together. This group may not be in the center of the target. Determine the center of the group. If the center of your group is one-inch low and two-inches right of your point of aim, you must use the scope adjustment screws to move the center of the group one-inch up and two-inches left. In this case, move the scope adjustment knobs in the direction indicated on the knobs (i.e., up to move the group center up, and left to move the group center left).



Place Your Shots in a Grouping

Fire another three shot grouping. Do not rush your shots. Give your rifle barrel time to keep cool. A hot barrel will not shoot to the same place as a cold barrel. You will be hunting with a cool or cold barrel. After this second group, you may need to make further adjustments with the scope. Continue to fire another three shot grouping and make adjustments until your three shot group is centered on your point of aim at 25-yards.

Move the target to 100-yards and repeat the process. Cartridges such as the .270 and .30-06 will place your shots about 2.5- to 3-inches higher than you aimed the cross-hairs. If your rifle is sighted-in 2.5- to 3-inches high at 100-yards your rifle will be sighted-in to about 250-yards. By sighted-in, we mean that your bullet will never rise or fall more than 4-inches from the intersection of the scope cross-hairs.

If you use this method to sight-in, you should be able to correctly place a shot on any Alaskan game animal out to 200-yards by simply holding the cross-hairs in the middle of the vital zone and squeezing the trigger.



Physical and Mental Preparation

A hunter must be physically able to hunt responsibly. This may mean walking for a number of days while hunting for a game animal. It may also mean difficult climbs up a mountain each day. Hunting in Alaska may mean walking through muskegs, dense alder thickets and crossing creeks. Even after all the hard work of finding an animal, experienced Alaskan hunters will say that the work really begins when an animal is killed.

If you are a successful moose hunter you will have to pack out all the edible meat. One hindquarter of a mature bull moose may weigh 125-pounds or more. All of the edible meat may weigh over 500-pounds. Every pound must be carried out of the field. In some areas of Alaska you may be able to use off-road vehicles to help you carry the meat back to camp. In many prime hunting areas vehicle use is not allowed during hunting season, leaving you to pack the animal out on your back.

Even if you are lucky and find an animal within a mile of camp there is a lot of work involved in hunting, cleaning and packing out that animal. The ground that you must walk over will likely be uneven, soft or covered with dense brush.

You should begin your conditioning at least four to six months before your hunt. Thirty minutes a day of jogging, bicycling, swimming, or weight lifting can help you prepare for hunting. The best exercise is simply placing a pack on your back and hiking. If you are going to hunt in the mountains and there are no mountains near you, then put on your pack and walk up stairs or stadium steps. For conditioning, start packing weight loads approximately one-tenth your body weight and increase the amount to approximately one-fourth your body weight.

Your hunt will be far more enjoyable if you are physically up to the challenge. Talk to your doctor, physical trainer or an athletic coach for help in making a specific plan to prepare yourself for your hunt.

Besides physical conditioning, hunting in Alaska demands far more logistical planning than almost anywhere else. Weather plays a major role and must be factored into any plans. You must be self-reliant, capable of remaining in the field longer than expected under difficult circumstances. Services and creature comforts are few. Inadequate planning, poor preparation or underestimating the wilderness can lead to a miserable or even fatal hunt. For guidance, we recommend using the Alaska Hunt Planning Worksheet (Page 51).



First Aid and Survival Skills

As Dr. Peter Goth puts it: "Wilderness first-aid is when somebody yells for help and what they get is you." Every hunter should be trained in basic wilderness first-aid skills and cardiopulmonary resuscitation (CPR). The first-aid skills hunters need are specialized. First-aid in a wilderness setting may involve extended care for the patient until help arrives, difficult environments and limited equipment. These special conditions can make injuries, that would be easily handled in town, a trip ending or life threatening situation.

The Most Important First-Aid Skill is the Ability to Know When to End the Hunt and Seek Professional Help

On a wilderness hunt, blisters and frostbite can become infected. Infections can end a hunt and even require emergency evacuation.

Possibly the most important first-aid skill for hunters is the ability to determine when an illness or an injury is serious enough to end the hunt and evacuate the patient. Dr. Goth puts it this way: "In the practice of wilderness medicine, it is often said that once a medical condition is serious enough to have a name on it, field treatment is often inadequate and the patient's only chance for recovery is evacuation to a hospital."

When Planning Your Alaskan Hunt Make Sure Every Member of Your Party Knows How to Use the Contents of a First-Aid Kit

One of the best ways to gain wilderness first-aid training is to participate in a Wilderness First Responder course. These courses address the challenges of administering first-aid in the backcountry. Cuts, burns, blisters, hypothermia and dehydration are common conditions that can end a hunt if not treated. It is recommended that everyone in your party have CPR and Wilderness First Responder training.

Basic and advanced first-aid training is available from a variety of sources. Contact the Red Cross for available first-aid training. If you live where you cannot attend a clinic or a first-aid course, there are several excellent books on wilderness first-



Wound management kit (left to right): SAM® splint, povidone iodine, compound Benzoin tincture U.S.P., antiseptic towlettes, wound closure strips, burn pads; (front) syringe and latex gloves.

aid. *Wilderness and Travel Medicine*, by Eric A Weiss, M.D. is a compact paperback guide that is recommended to be read before your trip. It is also an excellent reference that can be carried along on your trip.

What Should Be Packed in a First-Aid Kit for Hunting?

The first-aid kit should be packed in freezer strength re-sealable bags so that you can clearly and quickly see the contents. You may also want to include personal items and items necessary for the particular area you are hunting. Referring to the worksheets in the back of this booklet will help ensure that you include the proper material in your first-aid kit.

What is a Real "Survival" Situation?

You are in a survival situation when anything happens that places you or your hunting partner's life and/or health in danger.

In Alaska, falling out of a boat or canoe into cold water, crashing in a bush airplane, getting lost, cutting yourself deeply with a knife, axe, or chain saw, having an off-road vehicle break down miles from any town, or coming face to face with a mother grizzly with cubs are examples of possible survival situations.

Causes of Survival Situations. . .

The truth is that poor judgment and poor preparation are the main causes of people who are “unlucky” enough to get in survival situations. Acting without thinking about consequences of your actions is an example of poor judgment. For example, your desire to take a sheep or goat may lead you to climb a rock face that you may not be able to safely get down, much less with a pack full of meat and hide. Other examples of poor judgment include failure to wear a life jacket when canoeing or boating, or continuing to walk through a dense alder thicket on a trail full of fresh bear sign!

Become Mentally and Physically Prepared!

Before you go off-road you should take the time to prepare yourself physically and mentally to survive. If you are fully prepared, the chance of finding yourself in a survival situation is greatly reduced.

Preparing for your hunt means getting into good physical and mental condition. People who become exhausted make poor judgments and physical mistakes when handling firearms, knives and other potentially dangerous tools. People who are not in good physical condition are less likely to survive emergency situations that require a lot of physical strength or stamina.

Preparing mentally means having good quality survival gear, keeping it in good working order, and practicing with it so that you know how to use the gear. Being mentally ready also means having the knowledge and skills so you will know what to do, and what not to do when the time comes. If you have good navigational gear and practice your navigational skills, you probably will never get lost. If you practice making fires under difficult conditions, you will be able to start a fire to stay warm and comfortable. If you know how to stop severe bleeding then you are more likely to save your own life or the life of your hunting partner.

Remoteness Equals Risk!

The farther you are from help the more serious even small injuries and accidents become and the less you can depend on quick help or rescue. When you are in remote areas, it is more important to plan and equip yourself to survive.

Carry a pair of gloves to protect your hands. Always carry a loud, orange whistle to signal for help. Pack a signal mirror. Be careful not to solely rely on flares or smoke bombs, as they frequently fail to work. Instead, carry two mini-mag flashlights along with your mirror. Alaska’s remoteness and vast mountains may limit the use of cell phones and/or a GPS. Therefore, depend on a map and compass as part of your survival gear.

The first feeling you will likely have when you become lost is panic and embarrassment. Panic and the poor decisions caused by panic are far more likely to end in death than being cold, hungry, or lost. The first step in surviving is to sit down and get control of yourself and your thinking processes. Drink liquids and eat a snack. If you stay on your feet, you will keep moving which will only make your situation worse. Survival is the result of having



Survival kit includes (left to right): head lamp, glove warmers, strike-anywhere matches in waterproof container, space blanket, emergency stove with fuel tablet, wind proof lighter, and whistle.

enough knowledge and training to make the right decisions.

Too much survival material deals with long-term survival such as building shelters and identifying low energy food, such as edible plants. Information and training needed to spend a few nights alone until help arrives is more important and will keep you from getting into an actual survival situation.

To stay warm you must keep your head covered. Carry a warm stocking cap or head sock. Carry a four-millimeter thick heavy-duty, bright colored trash bag. It will make an emergency shelter and is water

and wind proof. Take a corner of the bag, go down about eight-inches and cut a hole just large enough for your eyes and nose. Put the whole bag over your body. The corner should be sitting on top of your head. Then sit on a piece of closed cell foam to insulate you from the wet and/or cold ground. At some point you may wish to build a fire. To start a fire, carry a metal match and strike-anywhere wooden matches in a waterproof case.

What Should Be Done if You Feel Hypothermic?

If you become cold and wet put on dry clothes, cover your head to stop heat loss, and start a fire. Replenish lost energy by drinking hot liquids and eating high-energy foods (like candy), and never drink alcohol.

Survival is the result of having the knowledge and training to make the right decisions. Hunting in remote areas places great importance on being self-sufficient. The nearest help may be well over a hundred miles away and the terrain you cross to get to safety may be difficult or impossible to navigate, especially if the weather conditions are a factor.

How Do You Learn Survival Skills?

Survival skills can be learned and practiced, even if you live in a city or town. Everyone, regardless of age, should be trained in and practice survival skills before they go hunting. Good sources for survival training include the basic survival training clinics offered by the Department of Fish and Game and more advanced survival training offered by companies who specialize in teaching survival skills. Contact the Department of Fish and Game, Hunter Information and Training office for information on survival training in your area.

What Should You Do When You Become Lost?

S

Sit down. Take a few minutes to relax and get control of yourself. Try to calm your fears, and do not panic. You are smart enough to think of a solution.

T

Think. Sit down and drink some liquid and eat a snack. If you stay on your feet you will likely keep moving which will only make your situation worse.

O

Organize your thoughts. Relax, do not let your mind create more problems than really exist. Focus on what steps need to be taken to get out of the situation.

P

Plan your actions. Do not react to your situation. If you have taken survival training and have a basic survival kit you will likely be found safe and sound.

Water Treatment

When you camp, hike, fish or hunt in Alaska you may find yourself far away from villages, towns, and cities. However, being at a distance from civilization does not mean the waters in the ponds, lakes, streams, and rivers are necessarily safe to drink. Some people are able to drink untreated water taken directly from high mountain springs and do so with no ill effect, despite the fact that untreated water is more likely than treated water to contain

microbial contaminants (bacteria, viruses, and parasitic protozoa) that can cause illness. Across Alaska, it is safe to assume that various microscopic parasites are present in natural water sources occurring in low-lying areas or where animals or other people also use the water. People who are exposed and sensitive to these unseen "bugs" can have their outdoor experience ruined by illness. Protecting yourself is the best strategy.



Giardia Lamblia and Cryptosporidium

The most common parasite is the tiny single-celled protozoan called Giardia lamblia, or Giardia for short. This parasite lives in the intestines of infected humans or animals, including many common Alaska mammals such as beavers, muskrats, moose, caribou, and deer. Giardia cysts are found on surfaces or in soil, food, or water that has been contaminated by fecal material from infected humans or animals.

You can get giardiasis, sometimes referred to as “beaver fever,” by drinking contaminated water or by using utensils that have been washed in contaminated water. Giardiasis can cause variable symptoms in different people, including diarrhea, increased gas, loss of appetite, cramps and bloating. Symptoms may appear a few days to a few weeks after ingesting Giardia, and they may recur intermittently over a period of many months. Giardiasis can be successfully treated with proper medical care. If you experience these symptoms within a few weeks of your trip, ask your doctor to test for it.

The other common parasite is called Cryptosporidium or simply Crypto. Crypto is also a microscopic single-celled protozoan. Symptoms show up in two to four days after exposure; they are very similar to symptoms caused by Giardia except that they may be accompanied by fever and typically last longer than giardiasis. There is currently no effective treatment for cryptosporidiosis, so protecting yourself against these parasites is very important. Both Giardia and Cryptosporidium have been found in surface waters throughout Alaska.

Protection Methods

How do you keep from getting Giardia and Crypto? Washing dishes with soap and drying them will not kill these tiny protozoa. Iodine or chlorine added to water will kill Giardia but not Crypto. Boiling water before you use it is the most reliable method to kill Giardia, Crypto and almost any other microscopic organism that can hurt you. If you boil the water for a full three minutes, you will kill any protozoa or viruses the water contains.

However, boiling all your drinking water takes a lot of time and fuel. If you are backpacking or float-hunting and cannot take enough fuel to boil all your water, bring a good quality water filter. Some portable water filters will remove Giardia and other disease-causing organisms. They are a good investment. The best units have a filtering system that screens out the larger organisms and a purifier that chemically destroys the tiniest bacteria and viruses. Make sure your filter will remove Giardia; not all will. A MSR® filter will remove 99% of all protozoans and bacteria. Also remember that filters can become ineffective in freezing temperatures or when used with sediment-laden water that hasn't been allowed to settle for at least an hour. Read and follow the instructions carefully when you use a filter. When in doubt, boil your drinking water to be safe.

For more information on backcountry drinking water methods, see the U.S. Centers for Disease Control and Prevention (CDC) website at http://www.cdc.gov/healthywater/drinking/travel/backcountry_water_treatment.html

For CDC water treatment methods, see <http://wwwnc.cdc.gov/travel/page/water-treatment.htm>

Finally, for CDC information on safe drinking water in general, go to <http://www.cdc.gov/healthywater/drinking/index.html>

Leave No Trace

Part of the appeal of hunting in Alaska is that so much of the state is virtually wilderness. You can help assure the enjoyment of future hunters and other outdoor users by minimizing your impact. Leave little or no mark of your passing by following these tips:

Low Impact Camping Techniques

Use a map and compass to find your way when hunting. If necessary use surveyor's ribbon to mark your path. Remove the ribbon on your return to camp. Never use an axe to cut "blaze" marks on a tree. A tree cut by an axe is subject to infection and insects. An injured or infected tree may die.

Stay on established trails if you are using off-road vehicles, horses, or other livestock. Off-trail travel removes vegetation from the soil and allows erosion to begin.

Camp at least 200-feet from any source of water. Use previously established campsites rather than impact a new area.

In frequently used areas, use a camp stove rather than a campfire. In more remote areas you may build a fire ring and a small fire using dead wood. Make sure to put out the fire before leaving camp. Fires can burn down into organic layers in the soil and flare up days after you leave camp. Put every fire out with lots of water and stir the ashes to make sure there are no "hot spots" left in the fire ring.

If you are using livestock, never tie horses or other animals to trees. Use hobbles, pickets, a temporary hitch pole, or a hitch line between trees.

Wash yourself and dishes away from ponds, lakes, streams, or rivers. This will keep soap from contaminating the water. Dispose of wash water well away from your campsite and any pond, lake, stream, or river.

Keep human waste away from campsites, lakes, ponds, streams and rivers. In frequently used areas, dig a hole and bury solid human waste six- to eight-inches deep. Fill the hole in with the soil that you removed.

Leave no trace of your campsite. Do not use nails and wire to build camp structures. Learn the skill



of lashing if it is necessary to build any structure or supports for meat and shelter. Be sure to take the structure apart before you leave the campsite.

Fire Awareness

Hunters too often ignite forest fires. While a fire can be an important part of a camp comfort, hunters should know how to contain a warming or cooking fire. A rock fire ring may be useless on tundra where dried vegetation may carry fire under the surface. Build fires only on mineral soil. Properly used, stoves are less likely to start forest or grass fires.

Minimum Impact Hunting

You can help assure the pleasure of future hunters and other users by minimizing your impact. The best hunters leave little or no mark of their passing by following these tips:

- ⊕ Burn your trash and pack out what is not consumed, including shelter materials.
- ⊕ Use dead or downed trees. Dismantle meat poles and other lashed structures when you are finished with them.
- ⊕ Remove flagging ribbon or biodegradable tape after use.
- ⊕ Make sure fires are completely out and scatter burned wood and rocks used for fire-rings.

Safety in Bear Country

Black and brown/grizzly bears live almost everywhere in Alaska. In most cases, bears usually avoid people or try to bluff their way out of an uncomfortable situation. Generally, the only time they attack is when they feel threatened. The threat could be to their cubs, food source, or personal space. When bears feel threatened they may attack until they feel the threat is neutralized or they see a way to escape. Bear attacks may occur when a hunter, moving quietly into the wind, surprises a bear at close range. Bears also may attack when defending an animal carcass. The best way to avoid conflicts with bears when hunting is to remember the following simple rules.

Learn About Bears and Their Behavior

Educate yourself about bears. Learn about where they live and what they like to eat during the time you will be in the field. When you are hunting, keep alert for fresh bear tracks and droppings. Try to stay away from obvious bear trails and feeding areas, such as trails near streams and lakes when fish are abundant.

Let Your Presence Be Known to Possible Bears in the Area

If a bear hears or sees you coming in its direction, it will almost always move away from you. You will likely never see or hear the bear. When you are stalking game, be very alert to the possibility of surprising a bear. If you do surprise a bear, talk loudly and wave your arms above your head. If you have a hunting partner, stand side-by-side to make yourselves look larger. Don't turn your back and run; the bear may mistake you for an animal to be chased and caught.

Immediately Remove Game Meat

You should immediately field dress a game animal after the kill. Be alert for bears that may be drawn to the kill site and be sure to remove the meat from brushy areas as soon as possible. Try to pack all the meat out in one load. If this isn't possible, place the remaining meat in game bags, hang them from a tree, or stash them in an open area at least

100-yards away from the kill site. Leave the gut pile and excess bones or carcass for bears, and flag the area with biodegradable material to warn other hunters.

When you are packing out game meat, talk loudly and make lots of noise to announce your presence to any bear in the area. Temporarily mark your meat cache with bright colored surveyor's tape (remember to remove it with your last load). This will help you relocate the cache and also help you approach it with caution. If you come back to the cache for a load of meat and a bear has claimed it, do not try to drive the bear away. The meat is probably already soiled and Alaska State Regulations prohibit killing a bear to retrieve hunter-killed game.

Camping Precautions in Bear Country

Don't camp in an area or near trails being frequented by bears. Keep your cooking area as far downwind as possible from your sleeping tent to avoid drawing bears into your camp. Be meticulous and keep a clean camp. Store food and unwashed cooking utensils in clean, airtight containers to minimize odors.

Avoid cooking or eating in your tent. If possible, hang food out of a bear's reach and never have any food in your sleeping tent. Remember, other hunters may use your campsite, so make sure you leave it as clean as when you arrived. Garbage, food and beverage cans should be stored in airtight containers and brought back to town for disposal. Paper and other combustibles can be burned daily, but be sure to clean up any unburned material immediately. Bears can easily find buried food or garbage.

Tips When Bringing Fresh Game Meat Into Camp

Avoid dragging a freshly killed game animal into camp. This leaves a scent trail for bears to follow. If you field dress an animal and have blood on your hands or clothes, be sure to wash thoroughly and change clothes before you enter your sleeping quarters or sleeping bag. Never trim hides or meat around camp, the scraps will attract scavenging bears long after you leave.

Store meat, hides and blood-soaked clothing away from your camp. It is best to put them in a secure outbuilding or hang them in a tree at least 15-feet off the ground. If you get the meat back to camp and a bear takes the meat while in camp, Alaska State Regulations prohibits killing the bear. To deter a bear in camp, make loud noises, yell at the bear, and bang pots and pans together to try and drive off the bear.

Safety And Protection When Hunting

Never approach a bear. If you encounter a bear, leave the area without disturbing the bear. If the



Analysis of a Bear Attack

If you hunt deer on Kodiak island, in Prince William Sound, or on Admiralty, Baranof, or Chichagof islands in Southeast you will be hunting in the presence of brown bears. Many hunters never see a bear, and those that do usually see them headed in the opposite direction. Once in a while, though, things can go terribly wrong.

The following incident is a re-creation of a bear attack near Kodiak Island. This information has been pieced together by examining the evidence and interviewing the victim's hunting partners. Analyze this incident based on the bear safety rules in the previous section.

The man, an experienced deer hunter, was hunting alone on the slopes of a mountain. The slopes were covered with high grass separated by strips of dense alder thickets and spruce trees, great hiding places for the abundant black-tailed deer and bears. About noon, the hunter spotted a deer and killed it with a single shot. Rather than pack the deer down the mountain and back to camp, the hunter decided to continue hunting. He tied a piece of toilet paper to a nearby bush marking the kill spot, and then continued to hunt that afternoon. While the man hunted, a large male brown bear smelled the deer carcass. The hungry bear quickly found the deer and began to feed.

As the afternoon shadows grew longer, the hunter returned to the kill site. It was hard to

see the deer carcass because of high grass and brush around the site. As the hunter approached the area the bear rushed from the carcass and attacked the man. The startled hunter shot the bear, wounding it in the shoulder. As the hunter attempted to reload for another shot, the bear knocked him down, throwing the rifle 40-feet away. The bear bit the man in the head and grabbed him by the hips with his powerful jaws before breaking off the attack and retreating into the brush. The hunter was able to move away from the attack site, however the man died of severe injuries and hypothermia before searchers found him.

bear sees you or moves towards you, stand your ground, shout and wave your arms to make it aware of your presence. A bear will usually retreat once it identifies you. Firing a rifle may frighten a bear, but don't count on it. Do not run from a bear. If attacked, roll in a ball and play dead. You may wish to carry a can of "bear spray" made from the oil of hot peppers. Bear spray has been proven to be very effective, when used at close range, in stopping bear attacks or minimizing injuries. Pepper spray should only be sprayed directly in the bear's face. Do not spray it on or around your camp. The spray is not effective in preventing bear attacks when sprayed on the ground or on objects in camp.

Q: What could or should this hunter have done to prevent this tragic accident?

A:

This hunter did not follow basic bear safety rules. He should not have been hunting alone in brown bear country. After killing the deer, he should have field dressed the deer, and immediately packed it out. If the hunter could not pack out the entire animal in one trip, he should have moved the remaining meat to an open area, well away from the gut pile. Upon returning, if he found the carcass had been moved he should have left the area as quickly as possible in the direction he came.

Spotting Alaskan Game

Alaskan game animals are most commonly active in the low light of early morning and late evening. Quality optics in the form of binoculars and spotting scopes are essential for the hunter to see into the shadows and pick out a deer or a moose from alder or willow branches. In the more open country of the tundra and mountain meadows, optics are useful to find game before it sees you.

Binoculars and spotting scopes help you determine whether you are looking at a legal animal, and to examine the landscape between you and game. You have a better chance of planning a successful stalk if you can see the ridges, depressions and brush between you and your quarry.



Examples of outstanding optics: Leupold® and Leica® spotting scopes, Swarovski® and Leica® binoculars.

Binoculars

One of the most important decisions you will make as a hunter is the selection of binoculars. Binoculars are described by two numbers such as 8x32, 7x20, or 10x50. The first number is the magnification. An 8-power binocular will magnify an animal or object eight times the size you see with the unaided eye. The second number is the size of the front (objective) lens in millimeters.

The more light a binocular allows to reach the eye, the easier it is to see in the poor light of dawn or dusk. You can estimate the amount of light a

Tips: Selecting Binoculars

Spend as much money on a pair of binoculars as you do on your rifle. Quality binoculars are expensive but will last a lifetime. Expect to pay \$300 to \$2,000 dollars for a pair of quality binoculars.

Make sure the binoculars you purchase are fog and waterproof— not just water or fog resistant. Hunting may become extremely challenging and frustrating if you are left with a pair of leaky or foggy binoculars in the field.

Do not try to save ounces by buying small, compact binoculars such as the 7x21 or 8x20. These small binoculars may be light and handy, but they are not bright enough for poor light conditions, and the image may not be as crisp and clear as a pair of binoculars with larger front lens.

Know the amount of magnification you will need. Binoculars help find game at long distances, but remember you also need them to pick out a moose's ear in a willow thicket at 30-yards. You may spend hours supporting a pair of binoculars to find game. It will be difficult to hold binoculars steady for long periods of time if they are more than 10-power. If you need more than 7- or 8-power for long distances, use a spotting scope. High quality 8x32, 8x40, or 8x42 binoculars will serve you well. If you really want more magnification, the 10x42 or 10x50 will do the job.

binocular allows to reach the eye by dividing the size of the front lens by the magnification. The higher the number, the more light will reach the eye. For example, a pair of 7x21 binoculars has a brightness factor of 3 (21 divided by 7), for a pair of 8x32's the brightness factor is 4, and for a pair of 10x50's it is 5. If all the binoculars in this example are of the same quality, the 10x50 pair will be "brighter." You don't need a "brightness" number greater than 5, because the human eye cannot use any more light.

Spotting Scopes

Spotting scopes are specialized optics for finding game at extremely long ranges or for looking at a specific animal in great detail. Quality spotting scopes are large, heavy and expensive. They are most useful for sheep, mountain goat, or brown bear hunting. They can help you determine the sex of mountain goats, estimate the size of the horns on rams, and the sex and size of brown bears.

Spotting scopes are described in the same way as binoculars that is, with two numbers. The first number is the magnification and the second number is the size of the front lens in millimeters. An example would be a 20x60 or a 15x45 scope. Many spotting scopes are made with a variable power lens. These scopes are described as 15-45x60, which means the magnification is from 15-power to 45-power and the front lens is 60-millimeters in diameter.

Tips: Selecting Spotting Scopes

A good pair of binoculars is better than a poor quality spotting scope. If you really need a spotting scope then expect to spend more than \$500 for quality optics.

The more power a scope has does not necessarily mean it's better. Because of heat wave mirage (yes, even in Alaska), it is difficult to see a clear image at long distances above 20- to 30-power magnification.

You need more brightness than you think. Remember the brightness equation for binoculars? The same holds true for spotting scopes. To see in poor light you need a brightness factor of four or five. These spotting scopes would do the job: 15x60 or 20x80. If you choose smaller, more compact spotting scopes, you will lose detail and brightness.

Be sure when choosing a spotting scope that it is fog and waterproof.

Tips: Selecting Riflescopes

Be careful not to purchase too much magnification. Too much power can lead you to believe the animal is within range when, in fact, it is too far away for a responsible shot. High magnification scopes are heavier and, because of their large front lens diameter, they must be mounted higher on the rifle. The higher the magnification the smaller the area (field of view) you can see through the scope. This can lead to an embarrassing situation if you leave the scope on high magnification when hunting. You may be so close to an animal that at high power all you see is hair!

You don't need a variable scope. A fixed 4-power scope will help you place the shot in the vital zone. Fixed power riflescopes are less expensive than variable scopes and often more reliable. If you want a variable scope select one with 6- to 8-power for the high end of magnification. Variables such as 1.5- to 6-power or 2- to 8-power scopes have a wide field of view that allows for quick and accurate shots at close range.

Never Use a Rifle Scope for Spotting Animals!

A responsible hunter never uses a rifle scope to spot or view game. If you use a rifle scope instead of binoculars or a spotting scope, you are violating one of the essential rules of firearm safety; pointing a loaded firearm at objects or people.

Riflescopes

A rifle scope is used to help a hunter precisely place the shot in the vital zone, and to determine if there are objects between the hunter and the game that would deflect a bullet. Always carry a variable rifle scope on the lowest power setting. If the animal is close you will be able to make a quick and accurate shot.

Riflescopes are described like binoculars with the magnification first and the front lens size second.

Shot Placement on Alaskan Game

The objective of every conscientious hunter is to kill an animal as quickly as possible to avoid its suffering and to insure the highest quality meat. An animal that must be shot several times will have muscles flooded with lactic acid and adrenaline, resulting in poor tasting meat. Before a hunter takes a shot it is his or her responsibility to be sure they can make a clean and accurate shot.

Alaskan game animals will quickly die when both lungs and/or heart are hit by a bullet or arrow. If you intend to hunt moose, brown bear, or bison In Alaska, use the most powerful rifle you can accurately shoot.

The Emphasis is on Accuracy, Not Power

The dollars invested on your hunt may tempt you to take a shot beyond the distances at which you are certain of hitting the vital zone. Haphazard shots result in wounded and lost animals. In a survey of Alaskan hunters, almost 4 out of 10 said they had killed a big game animal that had been previously wounded! Do not take shots if you are unsure or cannot locate the vital zone areas. Make a quick, clean, and accurate shot or don't shoot!

To Correctly Place a Shot for a Quick and Humane Kill You Must:

1

Use a rifle or bow that has been carefully sighted-in so that you know that your hunting tool is capable of placing a shot in the vital zone.

2

Study big game anatomy and learn what organs or bones your bullet or arrow may hit from various angles.

3

Learn about bullet drop and wind drift. Study how distance and wind will affect your bullet or arrow. This knowledge must be gained by actual practice.

Identify these parts in this diagram:

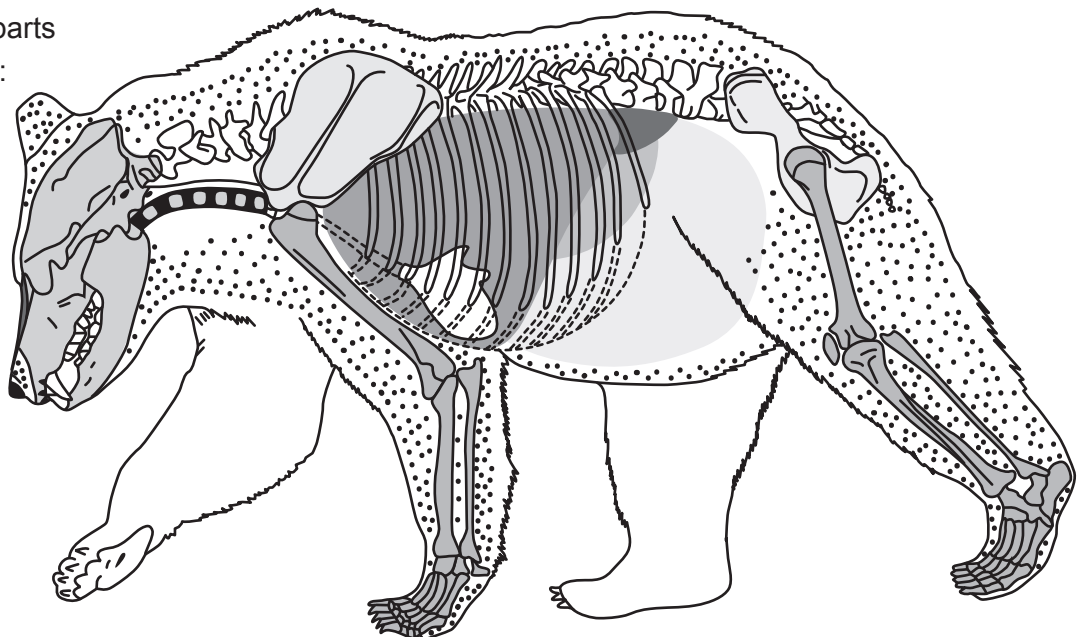
HEART

LIVER

LUNGS

SHOULDER BLADE

SPINE



Vital Zones

Here are some facts you should know about the relative size of the vital zones of a large game animal such as a caribou or moose.

1

The spinal cord passes through the spine. The spine is approximately the diameter of a soda pop can. The spinal cord is about the diameter of a penny.

2

The major arteries in the neck and body are about the diameter of a human adult's little finger.

3

The brain is about the size of a baseball and is encased in bone, about $\frac{3}{4}$'s of an inch thick.

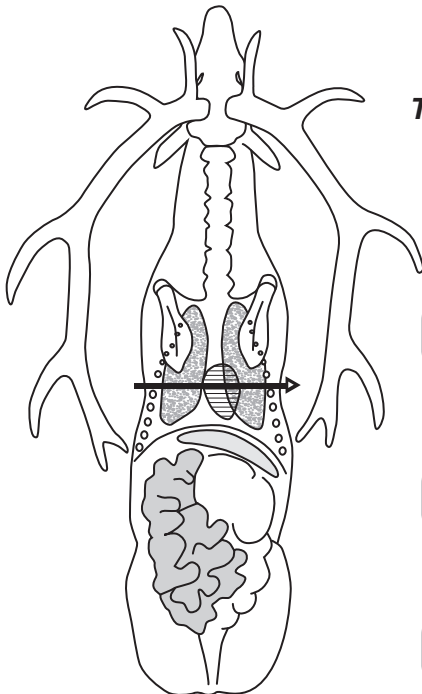
4

The heart-lung vital area is about the size of a basketball.



Given this information, where would be the best shot placement?

The correct answer is the heart-lung vital zone. Any other shot has too great a chance to wound the animal. There are a lot of stories about the spectacular result of head and neck shots. Some hunters have said: "Either you kill them instantly or you miss cleanly when you aim for the brain." This is absolutely false! Wildlife managers and hunters have found many animals with a nose or jaw missing from attempted brain shots. A neck shot may hit the esophagus or trachea allowing the animal to run away, leaving no blood trail and dying a slow death.



Heart & Double Lung Shot

The best shot placement is when the animal is broadside to the hunter or slightly facing away. A heart-lung shot from either position will likely puncture both lungs with the following advantages:

1

When an animal is hit in the heart/lung area a quick death is certain because an animal cannot function with a loss of both lungs and heart. If the bullet exits, the animal will probably leave a visible blood trail.

2

The heart-lung area is likely to remain stationary. It is more difficult to accurately place a shot in the animal's head or neck because these areas frequently move even when the rest of the animal's body is standing still.

3

A heart-lung shot minimizes a loss of meat if the bullet enters and exits through the ribs.

Where Should the Crosshairs Be Located for a Double Lung Shot?

On a broadside shot, place the horizontal crosshairs about one-third of the distance from the bottom of the chest to the top of the back. Place the vertical crosshair directly behind the near side front leg.

On the quartering away shot place the vertical crosshair on the opposite side front leg and the horizontal crosshair one-third of the way up from the bottom of the chest.

Where Will That Bullet Go?

Let's say that you are shooting a rifle that sends a pointed 150- to 250-grain bullet down range at between 2600- and 3000-feet per second velocity. This example would include a 7mm Magnum with 175-grain bullet, a .308 with 180-grain bullet, a .30-06 with 180-grain bullet, a .300 Winchester Magnum® with 180-grain bullet, or a .338 Winchester Magnum® with 225- or 250-grain bullet. All of these are popular choices with Alaskan hunters. You have sighted in this rifle to hit between 2.5 to 3 inches high at 100-yards. Based on the above information can you answer the following questions?

Q: If you place the crosshairs on a target at 200-yards, will your bullet strike above or below the point of aim? How far?

A: At these velocities the bullets will strike on the crosshairs (the point of aim) or 1 to 3 inches above the crosshairs.

Q: If you place the crosshairs on a target at 300-yards, will your bullet strike above or below the point of aim? How far?

A: The bullet will strike 4 to 10-inches below the crosshairs.

Q: If the wind is blowing from your right at 10 m.p.h. (a very light breeze) and the target is 200-yards away, how far from the point of aim will your bullet strike?

A: The bullet will strike 4 to 6 inches to the left of the point of aim.

Q: If the wind is blowing from your left at 20 m.p.h. and the target is 300-yards away, how far from the point of aim will your bullet strike?

A: The bullet will strike 10 to 14 inches to the right of the point of aim.

If you knew the answers to all the questions above, you are either a ballistics trivia nut or a very experienced, practiced marksman. If you know the answer to these questions by experience on the range then you will be comfortable taking most shots out to 250-yards when the wind is calm and you have a solid rest.

If you didn't know the answer to all the questions, especially the questions about wind drift, you should spend more time at the range and limit yourself to shots of 200-yards or less.

Recovering Wounded Game

You are responsible for tracking and recovering every animal that you hit. Even if the animal runs at the shot you must assume that your bullet or arrow hit the animal. Game animals that are shot in the heart-lung area will often take off at a full run. A double lung or heart shot animal will usually run a short distance.

Look For Signs of Shot Impact

A game animal hit behind the diaphragm or in the guts, may often “hunch up” at being hit, then run for shelter. Animals hit above the lungs, but below the spine may often run as if they were not hit at all. Animals hit in the jaw, nose, esophagus, or trachea may immediately run for cover. An animal hit in the antlers, spine, or brain will often fall down instantly, maybe so quickly you lose sight of the animal if you are using a scope. If an animal disappears quickly, chamber another round and be ready. If an animal is hit in the antler, a dorsal bone on the spine, or the skull is grazed it may jump up and run. If the animal is hit in the leg, the leg may “flop” around uselessly or the animal will drag it rather than picking it up.

Look for Tracking Signs

After you have taken a shot at an animal, stand still and focus your attention on the animal. If it runs try to remember the sight picture when you shot. This will give you a clue where the animal might be hit. If the animal runs out of sight pick out a landmark at the point where it disappeared. There is a lot happening at once, but try to mark in your mind the spot where the animal was standing when you shot. At this time use your binoculars to look in the direction the animal ran. It may have fallen or may be standing in cover watching to see if it is being followed. If it is not in sight, mark the spot where you were standing when you shot. Use your compass to set a bearing to the point where the animal disappeared. Next, move slowly to the point where the animal was standing when you shot. This spot can be hard to find so look carefully for any sign that would indicate that the animal was there and that it might be hit. Hair, blood and disturbed ground vegetation are all indicators that you are in the right spot.

Most animals have different colors and textures of hair on their bodies and knowing that can give you additional clues about where the animal might be hit. Blood is also a good indicator of where the animal is hit. Light frothy blood usually means a lung shot, although a hit in the trachea could produce the same sign. Dark blood may indicate the animal was hit in the liver or kidney area. Blood with small bits of vegetation and green stain means a hit in the rumen or intestine. If you don't find any blood it does not mean you have not hit the animal. A hit in an area where there are few large veins or arteries will produce little blood.

If an animal is hit in the heart-lung area and the bullet or arrow passes completely through the animal, there will likely be droplets of blood sprayed on the ground or vegetation. If the animal is moving through brush, the height of the blood trail on the vegetation can also give you a clue about the hit. A pass-through shot will result in blood on both sides of the animal's trail, while blood on only one side suggests that the bullet or arrow did not exit. However, a downward angled shot that passes through the vital zone may result in a blood trail on only one side because of the high entry point. Remember, a “gut-shot” animal can move faster than you can and will travel great distances if it believes it is being followed.

If there is no clear blood trail use your compass bearing and slowly begin to follow the animal. Move quietly and slowly and continue to look for blood signs. If you find tracks or blood, mark the spot with fluorescent surveyor's tape. In Alaska, it is best to quit searching when it gets dark. It is too easy to become lost in the dark. Return to the site the next morning, look and listen for crows, ravens, magpies and jays. They may lead you to the dead animal.

If you cannot track and recover an animal you are convinced you hit, you have an ethical decision to make: punch your tag or continue hunting and perhaps kill a second animal. What kind of hunter are you?

Field Care

The best way to learn to field dress big game is to help an experienced hunter with an animal. It is also good to review the steps to field dressing before the hunt. If you have never field dressed a moose or other large-bodied game animal you should purchase a copy of the Alaska Department of Fish and Game's Field Care of Big Game instructional DVD. This DVD will show you a step-by-step method to field dress a moose, elk, or caribou no matter how or where the animal has fallen. You can order the DVD by contacting the Alaska Department of Fish and Game in Anchorage.



The Meaning of Meat

“Look at how we — especially we hunters, who should comprehend the significance and meaning of meat — treat it. The worst offenders are the wanton destroyers of game — those who set out to kill animals with no intention of retrieving any part of them, their fevered brains making them just want to see something hit the ground. Then come the needless wasters who will shoot an animal for its horns or antlers, or for its hindquarters and back straps, and leave the rest.

Beyond such criminal disrespect of game meat lies a spectrum of possibly legal, but certainly unethical, behavior. And somewhere in there falls what I term the ‘technical hunter’... The technical hunter can be methodical, skilled and proficient when it comes to stalking and killing game. He will even care for an animal after the kill, making sure all of it gets packed out and then cut and wrapped. He will stack it neatly in his freezer, and there it will sit until he can either give it away to friends or donate it to the hungry. But he will never eat any of it himself, claiming he just doesn't like the taste... It's as if he has 20/20 vision, except for a single blind spot that conceals from him the axis that runs through meat to the hunt.

Then there are those ‘hunters’ who couldn't care less about what happens to a game animal after they've filled their tag. One game processor I talked with told me that up to 40 percent of the big game he receives arrives with some sort of spoilage, contamination, blood-shooting or worse — much of it brought in even by professional outfitters — and that the hunters, brought up on plastic-wrapped cow that appears as if by magic in the supermarkets, fully expect him to turn such offal into choice cuts of meat without having to throw away an ounce.

Hunters who care too much ruin game meat too. They fail to get the animal off the ground so that body heat can dissipate quickly. Or they will painstakingly roll an animal belly-down after dressing it to prevent debris from falling onto exposed meat, and in so doing create a trap for holding in meat-spoiling heat. They may even go so far as to pack the carcass with snow, in the misguided belief that this will aid in chilling, and succeed only in insulating the meat so it can sour faster.”

Excerpted from, “The Meaning of Meat,” Thomas McIntyre, Sports Afield, August 1997.

Meat Care

After you have killed an animal it is your responsibility to salvage all of the meat, in accordance with the Alaska State Regulations. Meat is more important than any trophy horn, hide, or antler. Alaska regulations state that the horn, hide, or antlers may be taken out of the field only after the meat is packed out.

Field Dressing and Care for Meat

Hunters should know how to field dress and care for game meat. Some hunters waste a lot of nutritious, tasty meat because they simply do not know how to properly field dress game. There are several good methods of field dressing. You will be successful with any method as long as you remember these keys to meat care: keep the meat cool, clean and dry.

Always Keep the Meat Cool, Clean and Dry

Heat is the greatest threat to game meat. To get the meat cool, remove the hide as quickly as possible and get the meat away from internal organs. The warmer the weather, the more urgent this becomes. Meat that spoils the quickest will be around the hip joint in the ham (rear leg). In weather over 60 degrees, it may be necessary to actually place the meat in cool water for 30 to 45 minutes to reduce the heat. A nearby creek, river, or lake will do the job. If this is necessary the meat must be immediately dried after removing it from the water.

Boned Out Meat is Difficult to Keep Clean, Cool, and Dry

Some hunters “bone” the meat, that is, remove all edible meat from the bones. The reason to “bone” the meat is to reduce the weight to be packed. The problem with “boning” is that chunks of meat placed together in a game bag are harder to keep cool and dry. In some management units in Alaska it is illegal to “bone” the meat because of a history of wasted meat.

After the meat is removed from the animal it should be placed in cotton meat bags. Good meat bags allow air to circulate to the meat but are tough



enough to hold heavy loads. The meat bags also help keep the meat clean.

Back at camp hang the bagged meat off the ground to help keep the meat clean and cool. Once all the meat is hung remove the bags and spray the meat with a citric acid/water mixture. The meat should be sprayed until the mixture begins to run off the meat. About two ounces of citric acid for each quart of water will do the job.

Spray Meat With Citric Acid to Slow Bacteria Growth

Food grade citric acid can be purchased at most pharmacies or feed stores. The citric acid will slow down bacteria growth that spoils meat. It also creates a dark outer “crust” that makes it harder for flies to lay their eggs on the meat. Don’t worry about the citric acid mixture getting the meat too wet. The mixture will dry quickly.

A tarp should be loosely placed over the meat pole to keep rain off the meat bags. The meat should be checked daily. The loose pieces of meat in the “hamburger” bag should be moved around each day to insure the meat keeps cool and dry.

If you are on a river float hunt it is very difficult to keep the meat dry and cool when it is stacked inside the raft. You must remove the meat from the raft every night before you camp and hang it where it can stay cool.

Nutritional Meat

Hunting for wild game contributes to a very healthy life style, according to nutritionists and physicians. Game is typically lower in saturated fat and calories than domestic meat. Alaskan game generally feeds on wild plants, shrubs, and trees that don't contain pesticides, herbicides, antibiotics, or growth hormones. Both exercise from hunting and eating game meat in moderation contribute to a healthy life. The following table clearly shows game meat is high in protein, low in calories and saturated fat.

Eating meat is good for the environment. A survey of the energy used to produce and distribute various foods has found that wild game meat is among the most energy-efficient – and least polluting – foods in our diet. The analysis includes the manufacture and application of fertilizers and other chemicals, harvesting, processing, packaging, transport and waste disposal. Compared to game meat, coffee, salad vegetables and white fish are environmentally unfriendly.

Nutrient Content

Species	Protein %	Fat %	Cholesterol (mg/100g*)	Calories (Kcal/100g*)
Bear (Black)	20.1	8.3	**	163
Beef (Lean Ground)	17.7	20.7	75	264
Beef (USDA Choice)	22.0	6.5	72	180
Buffalo	21.7	1.9	62	138
Caribou	22.6	3.4	67	127
Chicken	23.6	0.7	62	135
Deer (Mule)	23.7	1.3	107	145
Deer (Sitka)	21.5	2.7	18	117
Elk	22.8	0.9	67	137
Goose (Canada)	22.8	7.1	84	161
Mallard	23.1	2.0	140	152
Moose	22.1	0.5	71	130
Ptarmigan	24.8	2.3	20	128
Rabbit	21.8	2.3	81	114
Sharptail Grouse	23.8	0.7	105	142
Widgeon	22.6	2.1	131	153

* 100 grams equals 3½ ounces.

** Not available.

Reporting & Transporting Game

Reporting Game

Hunter reports are important to Alaska wildlife managers. We urge you to quickly report your harvest on the appropriate form. Most general season hunts are reported on a “harvest report” postcard issued along with the “harvest ticket.” Permit hunts are reported on a similar form that Alaska Department of Fish and Game issues along with the permit. In some hunts, your harvest must be reported within a day or two so game managers ensure harvest quotas are not exceeded. You will be able to mail a postage paid card for most hunts or report online. Note that the Alaska Board of Game has authorized the Department to institute a “failure to comply list” for hunters who fail to return certain harvest reports. “Failure to comply” hunters who apply for certain permits the year following their negligence will not be eligible for a permit.

Shipping or Transporting Game

Hunters must carry all game meat to their departure point from the field before removing antlers or horns from the kill site. Antlers and horns may be transported simultaneously with the last load of meat. After leaving the field, antlers or horns being transported must be accompanied by all the meat unless possession of the meat has been transferred to and accepted by someone else.

When the hunt is over, and your hunt reports have been returned, you may have antlers, horns, meat or other animal parts you wish to transport out of Alaska. There are a variety of restrictions covering how these parts may be transported. The following table summarizes the documents that you may need to obtain before traveling.

Shipping Within the United States

If you plan to ship any wildlife parts between states, packages must be conspicuously marked on the outside with both the name and address of the shipper and consignee, and an accurate list of the package contents by species and number of each species.



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Documents Required for Shipping or Transporting Game Out of Alaska That Was Taken with a Hunting License				
Species	Sealing Requirements	Travel only in the United States ¹	Travel through Canada or Export to Other Countries ²	
Black bear	S	N/A	C, D	C, D
Brown/Grizzly bear	S	N/A	C, D	C, D
Bison	N/A ³	N/A	D	D
Caribou	N/A ³	N/A	D	D
Coyote	N/A	F	D, F	D
Deer	N/A	N/A	D	D
Elk	N/A ³	N/A	D	D
Fox	N/A	F	C, P, D	D
Lynx	S	F	C, D, F	C, D
Mountain Goat	N/A ³	N/A	D, F	D
Moose	N/A ³	N/A	D	D
Muskox	N/A ³	N/A	D	D
Dall sheep	S	N/A	D	D
Wolf	S	N/A	C, D	C, D
Wolverine	S	N/A	D	D
Small Game⁴	N/A	N/A	D	D

Key to Required Documents for Non-Commercial Shipments⁵
(See page 35)

Key to Required Documents

Key to Required Documents for Non-Commercial Shipments⁵

(See Table on page 34)

S

SEALING: State game regulations require that brown/grizzly bears, black bears taken in GMUs 1-7, 11-17 and 20, lynx, wolf, and wolverine must be sealed by an ADF&G or Alaska Department of Public Safety (DPS), Division of Alaska Wildlife Troopers (AWT) representative. Brown/grizzly bears taken in GMUs 6A, 6B, 8, 12, 19D, 20D, 20E and 25D must be sealed within the unit, except that those taken in 20D or 20E may be sealed at Tok and those taken in GMUs 6A, B, and C may be sealed at Yakutat. All brown/grizzly and black bears must be sealed before they may be exported from Alaska. Sheep rams taken in Units 23, 25 and 26 must be sealed. It is illegal to transport sheep horns outside the state before sealing.

C

CITES PERMIT: Required for shipment of hides, skulls, meat or other parts of bears, wolves, or lynx out of the United States. An exemption applies for unprocessed (raw) trophies of black bear and sandhill crane. Available⁶ at U.S. Fish & Wildlife Service (USFWS, Law Enforcement [LE]) offices in Anchorage and Fairbanks. Fee required.

D

DECLARATION OF IMPORTATION OR EXPORTATION OF FISH & WILDLIFE (Form 3-177): Federal regulations may require this form for exporting meat, hides, skulls, trophies or other wildlife parts from the United States. Available⁶ from USFWS/Law Enforcement offices in Anchorage, Fairbanks, and Juneau, at the Tetlin National Wildlife Refuge in Tok, and at U.S. Customs offices or internet: (http://www.fws.gov/le/ImpExp/Info_Importers_Exporters.htm). Free. For any questions regarding declaration requirements, please contact the USFWS/LE, Import/Export Office, Anchorage (Tel. 907-271-6198).

F

RAW FUR EXPORT PERMIT/REPORT: This is required only for raw furs of coyote, arctic fox, red fox, lynx, red squirrel, wolf and wolverine. Wolf and wolverine are classified both as big game and furbearers. Available⁶ at ADF&G offices, DPS/Alaska Wildlife Trooper posts, and at many post offices and commercial cargo carriers. Free.

N/A

NOT APPLICABLE

Notes:

1. Minimal documentation is required to ship or transport trophies. Shipping of wildlife requires compliance with federal labeling requirements for any fish or wildlife imported, exported, or transported in interstate commerce (Ref. 50 CFR 14. 81 - 14.82). All road vehicles leaving Alaska must travel through Canada.
2. Other countries may require additional documentation for importation. Contact the customs office in the destination country.
3. Sealing is not required for these species. Be sure to return your harvest or permit report by mail after taking an animal or, if you are unsuccessful, at the end of the season.
4. Small game includes cranes, grouse, hares, ptarmigan, snipe, and waterfowl.
5. Commercial shippers may be required to file additional documentation.
6. Availability is subject to change. Please check document availability by telephone before driving long distances.

Animal Tracks & Sign

To be a consistently successful hunter it is essential to learn how to identify game animal sign and tracks. A hunter knows how to tell if the sign is recent, meaning he or she is in a productive area, or the sign simply indicates that animals have passed through the area or are present during another time of the year. Animal scat or droppings take different shapes depending on what the animal is eating and the time of year.

*Peterson's **Flash Guide: Animal Tracks** are easy to carry, laminated reference cards. Each card has the tracks, scat, habits, and the geographic range of an animal. The cards also show how to tell if the animal is running or walking. Spend time in the field learning to locate and "read" animal signs.*

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Bison

Description

A full-grown male (bull) stands six feet at the shoulder, is up to 10-feet long and can weigh more than a ton. Full-grown female bison (cows) are smaller but have been known to weigh over 1,200-pounds.

The horns of a bison curve outward and upward. The horns on a bull are larger and thicker than the horns of a cow. In late fall, the bison's coat is a rich, dark brown. When the weather warms, the hair loosens and hangs in patches until it is completely shed and replaced with new hair by late spring. Bison are known to live up to 20 years.



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Habitat

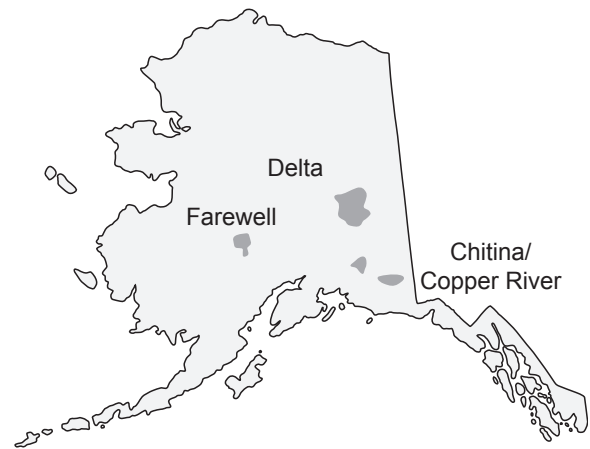
Alaskan bison were introduced into the Interior of Alaska from Montana in 1928. Since then, herds have become established around Delta Junction, Copper and Chitina river basins, and in the Farewell area. These animals thrive on a variety of habitats, including grasslands, river valleys and burned forests.

Bison are grazing animals and in Alaska find only limited amounts of food along rivers, in recent burns, and sedge potholes. Their diet consists of various grasses and forbs like vetch, a favored summer food found on gravel bars. Sedges, silverberry, willow and ground birch are also eaten. In winter, bison forage on dried grasses, forbs and shrubs.

Behavior

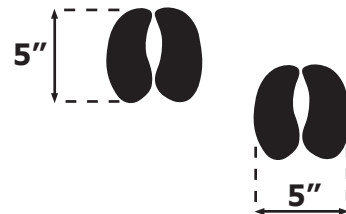
Bison have an excellent sense of smell and hearing used to detect danger. These animals are capable of distinguishing large objects from a distance of one-half mile and moving objects from one mile away.

Bison are migratory animals by nature and have seasonal movement patterns. Alaska's wild bison do not remain in a single large herd, but scatter into small groups that range up to 50 or more animals.



Tracks

On hard ground, the inner curved hooves may not appear. In snowy terrain, a heavy foot drag is evident.



Winter	Summer

Scat

In summer, when bison feed on lush vegetation, droppings resembles soft patties or pies. In winter, scat appears as dry-segments.

Caribou

Description

Caribou have brown hair with a white flank stripe and mane. Note that the mane color varies within sex and between individual animals. Both sexes possess antlers; male (bull) caribou have large, massive spreading antlers with brow tines pointing over the forehead. The antlers of females (cows) tend to be much shorter than bulls, and more slender and irregular in shape.

Caribou bulls are estimated to weigh 350- to 400-pounds when mature, however weights of 700-pounds have been recorded. Mature cow caribou average 155- to 225-pounds.

Habitat

Caribou are found in a variety of habitats from the Arctic coastal plain to foothills and mountains of Interior and South central Alaska. Caribou prefer treeless areas, but many herds winter in the boreal forest (taiga). Calving areas are usually located in mountains or on open, coastal tundra. Caribou tend to migrate to the same areas year after year, leaving deeply scoured trails in the tundra.

Like most herd animals, caribou must keep moving to find adequate food. In the summer, caribou eat the leaves of willows, sedges, flowering tundra plants and mushrooms. They switch to lichens (reindeer moss), dried sedges (grass-like plants), small shrubs (like blueberry) and willow in the winter.

Behavior

Shedding velvet in late August and early September by large bulls marks the approach of the rutting (breeding) season and the start of fall migration. Bulls will rub their antlers among low brush and small trees, leaving worn bark and broken branches. Large bulls shed their antlers as early as late October, and small bulls or non-pregnant cows shed their antlers as late as April.

In early September, bull caribou fight to control a number of females and prevent other bulls from breeding with those cows.

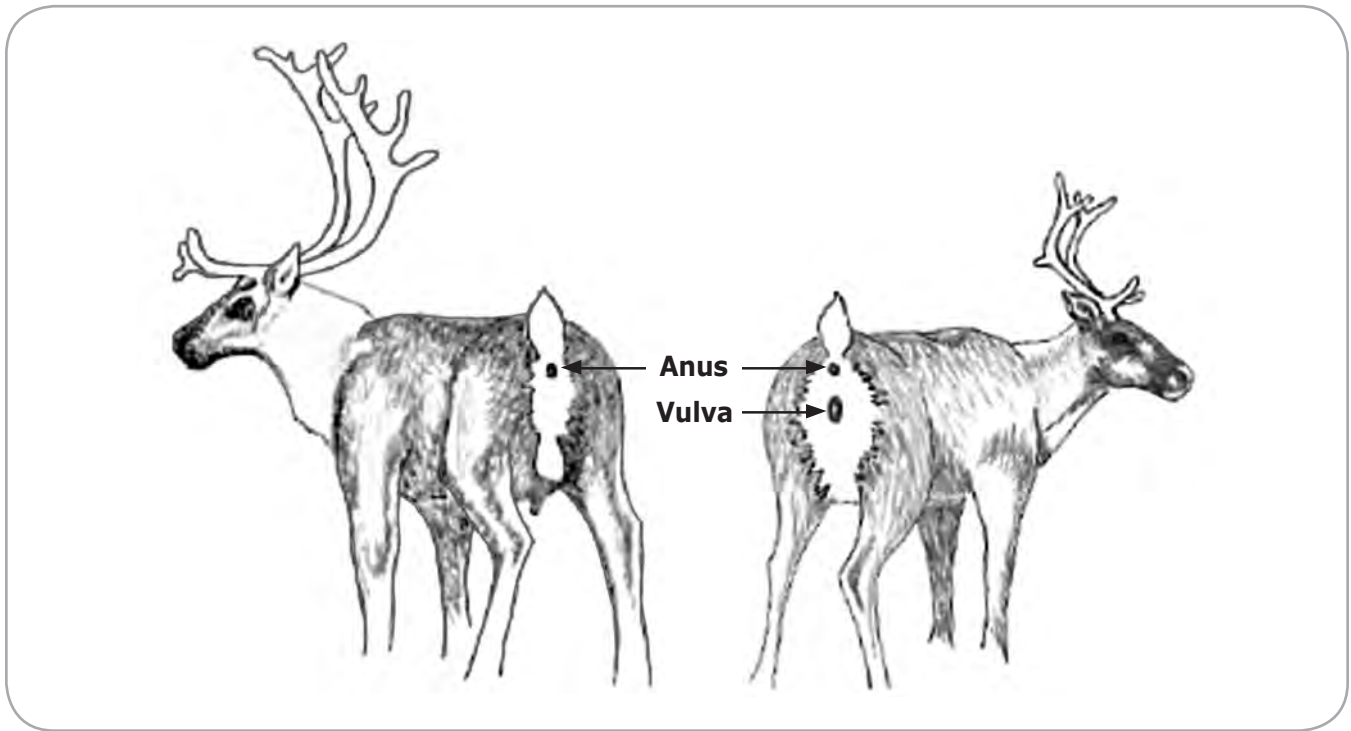
After calving, caribou collect in large herds to avoid predators and escape mosquitoes and warble flies. These large herds of caribou stay together in high



Tracks

Caribou have the widest and roundest hooves of all deer species. Their large, concave hooves are spread widely to support the animal in snow and soft tundra and function as paddles when caribou swim across lakes and rivers during migration. Male caribou tend to have larger front hooves than females.





mountains and along coastal plains where wind and cool temperatures protect them from summer heat and insects. After insect numbers decline in August, caribou scatter out and feed heavily on willow leaves and mushrooms to regain body weight.

Identifying Sex

Young bulls before the age of three are similar in appearance to female caribou. It is important to know that you cannot determine the sex of the animal solely by the antler size or the color of the mane.

- ⊕ Bull caribou have a penis sheath. It is possible to encounter problems viewing the penis sheath on bulls, when they are standing in brush, or when the animal's stance blocks the view. When bull caribou urinate, the urine stream will be visible in front of their rear legs.

- ⊕ Cows have a vulva, brown or black in color below the anus. The vulva and anus are visible when the tail is up, however, if the tail is down, only a portion of the vulva can be seen. When cows urinate, the urine stream is seen in the back of their rear legs.

Antler Size

- ⊕ Caribou are the only member of the deer family in which both sexes grow antlers.
- ⊕ Antlers on cows are generally smaller than bulls and have fewer than 15 points.
- ⊕ The upper end of large bull's antlers may be heavily palmated.
- ⊕ A large bull may have a palmated shovel immediately above the nose that is at least 10 inches tall.

Scat

The appearance of caribou scat differs in size and shape depending on diet. During the winter, caribou feed on small shrubs with high fiber contents. Winter scat appears in small, concave pellets. In the summer, scat is seen as soft clumps (pies) as a result of a diet of lush, green vegetation.



Dall Sheep

Description

Dall sheep are a stocky species of wild sheep with white coats, amber horns and yellow eyes. Males (rams) have massive curling horns, weigh about 200-pounds, and live between 10 and 12 years. Females (ewes) have shorter, more slender, slightly curved horns, weigh about 120-pounds, and usually live between 12 and 14 years. Dall sheep of both sexes stand between three to three and one-half feet high at the shoulders.

Habitat

Dall sheep are found in relatively dry mountainous terrain and frequent a special combination of open alpine ridges, meadows, and steep slopes with extremely rugged “escape terrain” in the immediate vicinity. They use the ridges, meadows and steep slopes for feeding and resting. When danger approaches they flee to the rocks and crags to escape pursuers. They are generally high country animals, but are sometimes found below timberline in Alaska.

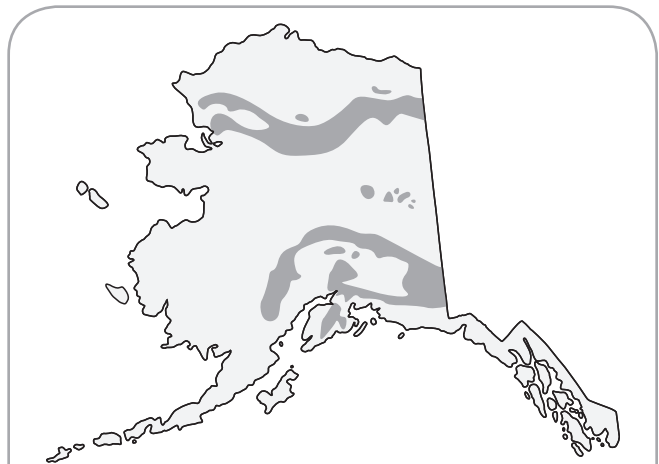
The diet of Dall sheep varies depending on the range. In summer when food is abundant, sheep eat a wide variety of plants. In winter, their diet consists primarily of dry, frozen grass and sedge stems available when snow is blown off open ridges. Some populations eat significant amounts of lichen and moss during winter. Many Dall sheep visit mineral licks during the spring (to replenish mineral reserves), and often travel many miles to eat the soil at these unusual geological formations.

Behavior

Sheep have well-developed social systems. Adult rams live in “bands” that seldom associate with ewe groups, except during the winter mating season. The horn clashing, (which rams are known for) is not a result from fighting over possession of ewes, but rather a means of establishing a social hierarchy. These clashes occur throughout the year and become more frequent before the rut when rams are moving among the ewes and meet unfamiliar rams of similar size.



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Tracks

Dall sheep have cloven hooves with rough footpads for traction on rocky terrain. The tips tend to be more round than deer or elk. Their hooves have a rectangular shape with straight sides.





Figure 1
Ram with both
horns broken

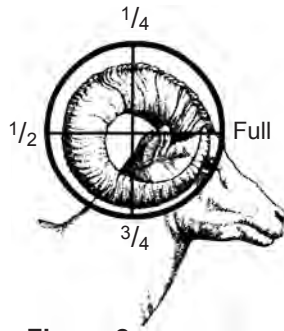


Figure 2
Full curl ram

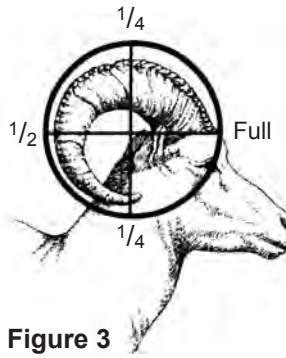


Figure 3
3/4 curl ram

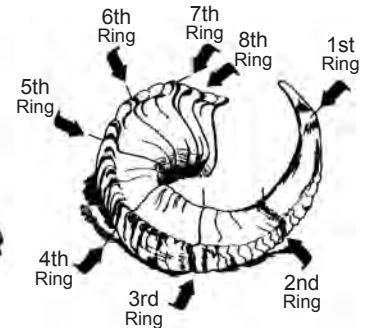


Figure 4
Annual horn rings

A Legal Ram is:

- ⊕ A ram with the tips of both horns broken (broomed) (Figure 1).
- ⊕ A full curl ram, whose tip of at least one horn has grown through 360 degrees of a circle described by the outer surface of the horn, as viewed from the side (Figure 2).
- ⊕ A 3/4 curl ram, as viewed from the side (Figure 3).
- ⊕ A ram at least eight years old as determined by counting annual horn rings and segments (Figure 4).
- ⊕ See current Alaska Hunting Regulations for ram horn sealing requirements.

Identifying Full Curl Rams

Rams resemble ewes until they are about three years old. As rams mature, their horns (which never shed) form a circle when seen from the side. Ram horns reach half a circle in about three to four years, three-quarters of a circle in five to six years, and full circle (full curl) in seven to eight years. The Alaska Game Regulations define a full curl horn as “the horn of a mature male Dall sheep, the tip of which has grown through 360 degrees of a circle described by the outer surface of the horn, as viewed from the side or with both horns broken”.

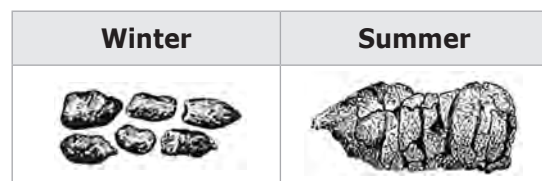
Horn growth occurs from spring through early fall. In late fall or winter, growth slows and becomes dormant. This cycle of growth produces a pattern of rings called “annuli”. These annual rings can be distinguished from the other rough corrugations on the sheep’s horns, and when counted, the ram’s age can be accurately determined.

It takes an average of seven to eight years for the ram’s horn tip to form a circle as seen from the side. Rams with both horns broken are included in the definition of full curl. These rams are usually very old and they will die before their horns will again grow to full curl. To determine the degree of curl of any sheep horn, look for the outline of the perfect circle and see how far around that circle the tip has grown. Ram horns are measured in fractions of a circle. A seven-eighths curl is closer to a full curl than one-half or one-fourth curl (which is common among young rams).

Don’t be deceived. Viewing horns at different angles may distort the curl’s appearance. A ram without a full curl can be viewed as having a full curl when observed at an angle that lines up the tip of the horn with the base. However, at this angle the horn will not form a perfect circle. Instead, it will form a flattened circle or ellipse. Therefore, be certain that the curl is circular and meets the minimum legal horn size for your hunting area.

Scat

The shapes of dall sheep droppings are similar to deer. The consistency varies from summer to winter based on the animal’s diet.



Moose

Description

Moose have coarse hair, long legs, and a drooping nose. The color of their coarse hair ranges from golden brown to almost black, depending upon the season and the age of the animal. They display a dewlap or “bell” of hair-covered skin under their throats. Male (bull) moose are known for their large antlers that are shed every year after rutting. Large antlered bulls are found throughout Alaska. Moose occasionally produce large antlers when they are six or seven years old, with the largest antlers grown at approximately eight to twelve years of age. Bulls in prime condition weigh from 1,200- to 1,600-pounds. and adult females (cows) weigh 800- to 1,300-pounds. Moose may live up to 16 years.

Habitat

Moose may be found throughout most of Alaska except on the Aleutian Islands, but they are most commonly found in Southcentral and Interior Alaska. Moose occur in a variety of habitats from the open tundra on the Seward Peninsula and the Arctic plains to the birch forest of Southcentral to the rainforest of Southeast. Moose seldom inhabit mountainous areas above 5,000 feet. Most moose make seasonal movements for calving, rutting and to wintering areas. They travel anywhere from a few miles to as many as 80 miles during these moves. However, some moose are year-round residents of one area and may live and die within a five-square-mile area.

Moose eat forbs, grasses, sedges and leaves of broadleaf trees and shrubs during the summer months from leaf-out in May until September. Moose are commonly seen in open meadows and in ponds during summer feeding on aquatic plants. At some point in late August or early September, moose begin changing their diet to include woody browse of willow, aspen, poplar birch and alder. In early winter, moose can be found near their rutting areas feeding on low shrubs, like diamond-leaf willow, which become snow covered later in the winter. As snow accumulates, moose are forced to lower elevations and feed on tall shrubs like felt-leaf willow along rivers and creeks. Lowland burns with sapling aspen and birch are also used in winter.



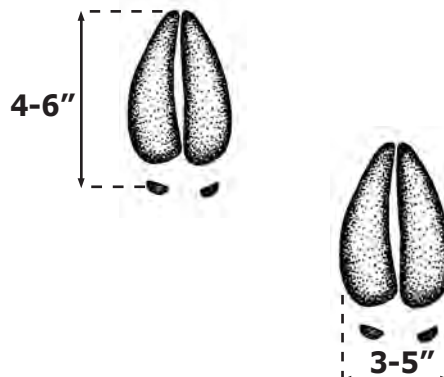
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Antler Size



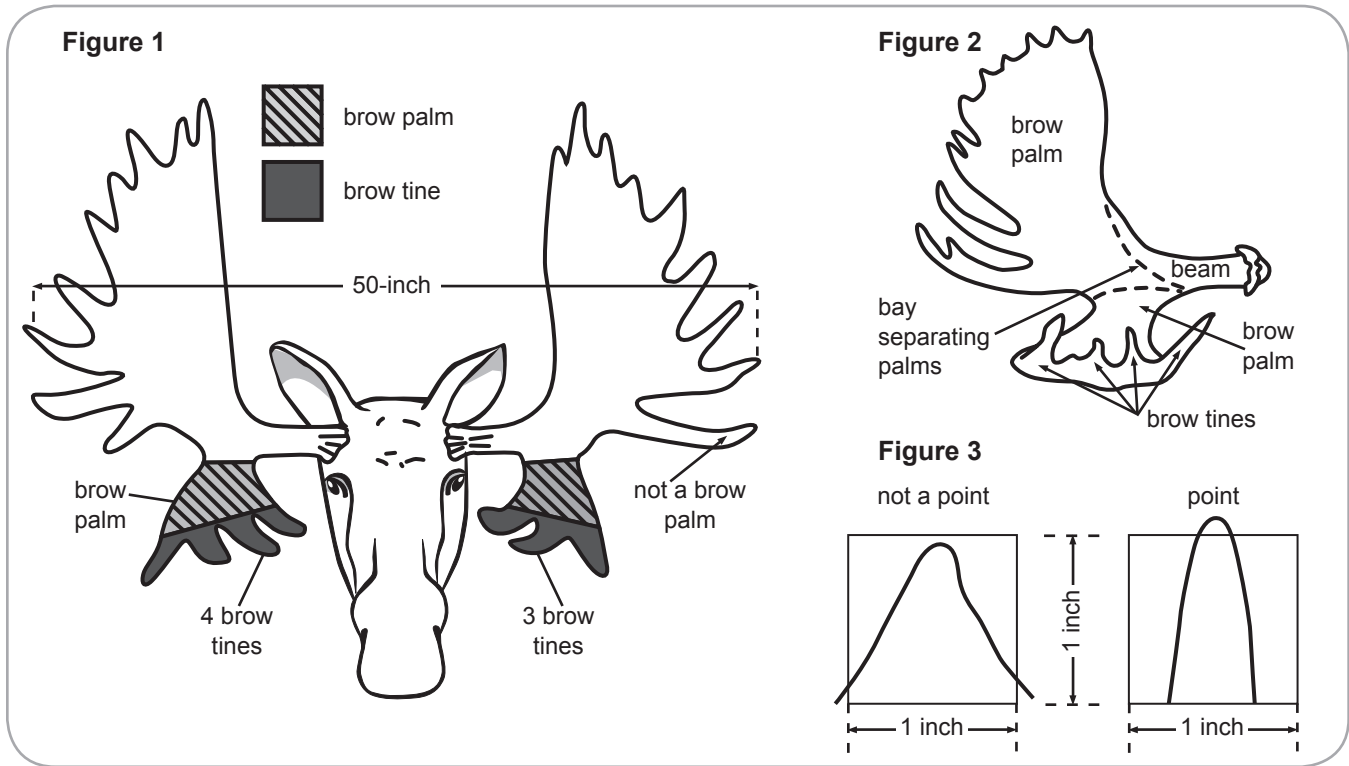
Tracks

Moose have large, cloven hooves that are more pointed than elk. They have an alternating stance that leaves an overlapping impression of tracks. Moose tend to travel along well defined, wide trails.



Behavior

Moose are solitary animals with a good sense of smell, sight, and hearing to protect them from natural predators. Moose breed in late September and early October. It is common for bulls to compete for cows, using their antlers. By late October, bulls have exhausted their summer accumulation of fat and tend to stay near their rutting areas for one to two months after breeding. Bulls generally shed their antlers in December and January.



⊕ A brow tine emerges from the first branch or brow palm on the main beam of a moose antler projecting forward; the brow palm is separated from the main palm by a wide bay; a tine originating in or after this bay is not a brow tine. (Figure 1)

⊕ Brow tines project off the brow palm or where the brow palm normally forms, and typically points forward. (Figure 1)

⊕ To accurately identify and count brow tines, bulls

must be viewed from the front; viewing from the side runs a risk of counting main palm points as brow tines. (Figure 1 and 2)

⊕ A point or tine is an antler projection at least one inch long, and longer than it is wide, with the width measured one inch or more from the tip. (Figure 3)

Scat

During the summer, moose droppings usually resemble cow patties resulting from feeding on leafy forage. In the fall, when their diet changes, pellets become more concave and dry.

In winter, pellets are hard and dry, reflecting a seasonal change in diet from leafy to woody forage.



Mountain Goat

Description

This blunt, squarish-looking animal has a narrow head with slender, black, shiny horns rising in a backward curve to a length of 10- to 12-inches. The coat is all white and on the chin is a “beard” of long hair. There is a crest of long erect hair (six or more inches in length) along the length of the spine. Their furry coat is much longer in winter than in summer. Both sexes have a crescent-shaped gland behind each horn that increases in size during the breeding or rutting season. Mountain goats may live 14 to 15 years, though most live fewer than 12 years.



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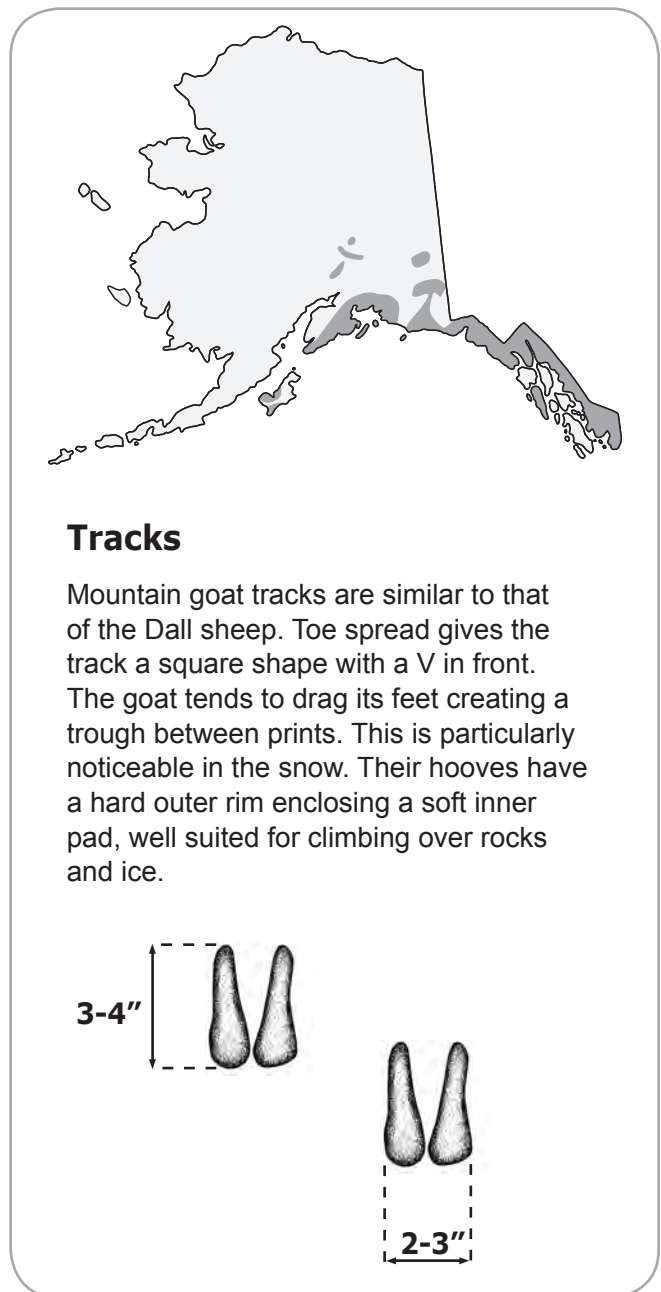
Habitat

Mountain goats inhabit steep and broken mountain terrain from southeast Alaska to Prince William Sound and the Kenai Peninsula. Goats are found from near sea level to more than 10,000-feet. Males (billies) are found either alone or in groupings of two or three in steeper, higher elevation country than females (nannies), kids and young billies. Summer months are spent in high alpine meadows and ridges. During the winter, forested habitats adjacent to alpine ridges serve as critical refuges for goats during periods of heavy snow accumulation, and steep rugged slopes provide important escape terrain from predators.

Depending on the particular habitat and season, goats tend to graze during the summer months, and browse in the winter. Generally during the summer, animals graze on grasses, herbs and low-growing shrubs in alpine ranges. As winter advances, goats descend to forested areas and onto south-facing cliffs, where they browse on hemlock, ferns, bunch grasses and twigs. However, some remain on windswept ridges where they feed on mosses and lichens and occasional dried grasses.

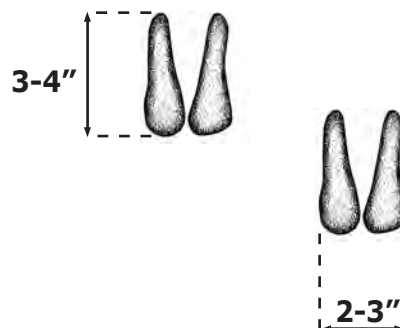
Behavior

Mountain goats tend to form small groups or prefer solitude during summer months and form large groups during the spring and winter months, especially during the rutting season (November and December). Nannies will seek solitude prior to giving birth, but soon join other nannies with newborns (kids) to form nursery flocks. Usually a single kid is born in late May or early June. Kids usually remain with their mothers until the next breeding season.

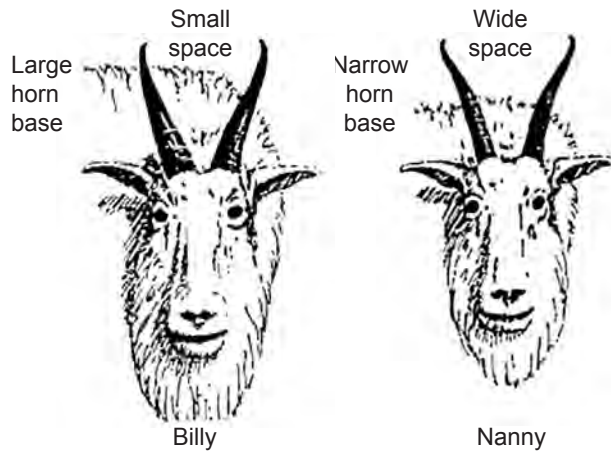


Tracks

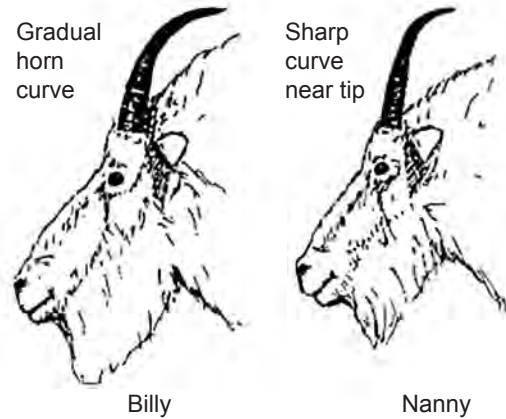
Mountain goat tracks are similar to that of the Dall sheep. Toe spread gives the track a square shape with a V in front. The goat tends to drag its feet creating a trough between prints. This is particularly noticeable in the snow. Their hooves have a hard outer rim enclosing a soft inner pad, well suited for climbing over rocks and ice.



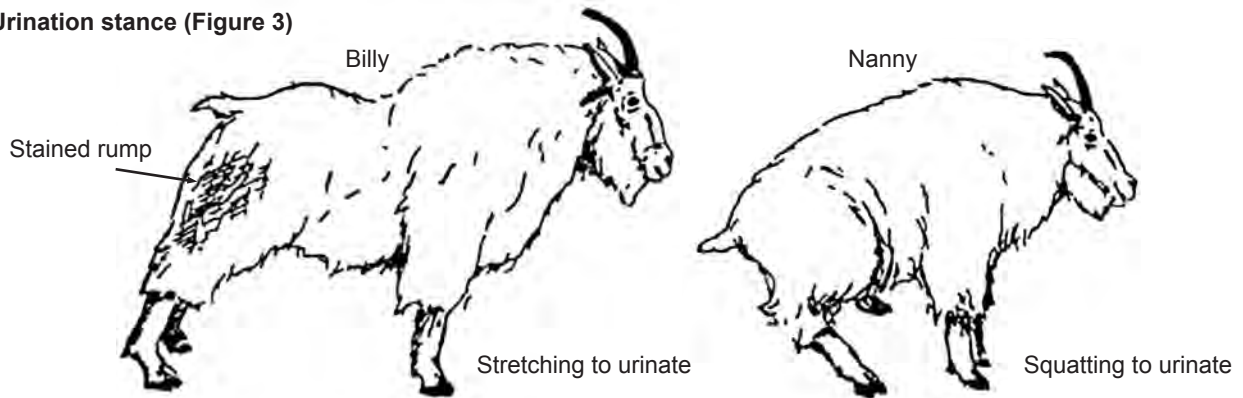
Horn width (Figure 1)



Horn curve (Figure 2)



Urination stance (Figure 3)



- ⊕ Billy goats have a large horn base with a narrow space between the horns. (Figure 1)
- ⊕ Nanny goats have slender shaped horns with a sharp curve near the tip of the horn. (Figure 2)
- ⊕ Billy goats feature a stained rump and will urinate by stretching forward. (Figure 3)

Identifying Sex

Billies are similar in appearance to nannies. Billies have a large, stocky shape and weigh an average of 200-pounds, and have a gradual curving horns. The diameter of the horn base is large which makes for a narrow space between the horns. A distinct characteristic of billies is the style of stretching to urinate, as opposed to females whom squat. Nannies are smaller in size and weigh approximately 160-pounds. The horns of a nanny are slender and curve sharply near the tip. Nannies have small horn bases with wide spacing between the horns.

Scat

Mountain goat droppings are easily confused with deer and sheep. However, the sizes of goat droppings are smaller than these other hoofed animals. Depending on the amount of moisture in the goat's diet, their droppings may vary from dry, hard pellets (winter) to a clustered mass of soft pellets.



Black Bear

Description

Black bears are the smallest and most abundant of the bear species in Alaska. They are about five to six feet long and stand about two to three feet high at the shoulders. They range in weight from 200 to 500-pounds. Black bears can be distinguished from brown bears by: (1) Head shape (a black bear's nose is straight in profile, a brown bear's is dished); (2) Claws (black bear's are curved and smaller, brown bears are relatively straight and larger); (3) Body shape (when standing, a black bear's rump seems to be higher than its shoulders, the opposite of brown bears).



© Gary Lackie

Habitat

Black bears occupy a wide range of habitats, but inhabit most of the forested areas of Alaska. It is not uncommon for these bears to settle in and around Alaskan towns.

Black bears generally eat foods high in protein or fat content. In spring, freshly sprouted green vegetation is their main food item, but they will eat nearly anything they encounter. Winter killed animals are readily eaten, and in some areas black bears have been found to be effective predators on newborn moose calves and deer fawns. In summer, feeding shifts to salmon, if available. In areas without salmon, bears rely on vegetation and berries throughout the year, especially blueberries. Ants, grubs and other insects help to round out the black bear's diet.

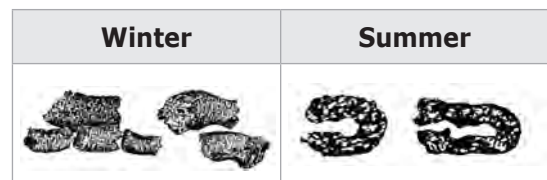
Behavior

Black bears have adequate senses of sight and hearing and possess an outstanding sense of smell. Bears are extremely powerful animals and potentially dangerous to humans. They are usually highly cautious and secretive, but if they have a food supply or young, they become defensive against all intruders. Every year bears encounter humans, especially near garbage dumps and fish drying racks.



Tracks

Tracks are smaller than brown bears and have a greater distance between the toes that are arranged in an arc.



Scat

The diet of black bears is varied which results in a range of scat types.

Brown Bear

Description

Adult brown bears have a prominent shoulder hump and long, straight claws which distinguish them from black bears. They gain weight rapidly during late summer and fall and most mature males (boars) weigh between 500 and 900-pounds, some weighing as much as 1,400-pounds. Females (sows) weigh 250 to 500-pounds. It has been noted that inland bears are usually smaller than coastal bears. The average life span of a male brown bear is 22 years, however they have been known to live up to 34 years in the wild.



© Gary Lackie

Habitat

Brown bears occur throughout Alaska except on the islands south of Frederick Sound in southeastern Alaska, the islands west of Unimak in the Aleutian Chain and the islands of the Bering Sea. Bear populations vary depending on the productivity of the environment. Although they are less common around human settlements than black bears, brown bears can live in close proximity to people. Preferred habitat range from the coastal rainforest of southeast Alaska to the coastal plain of the Arctic slope.

Behavior

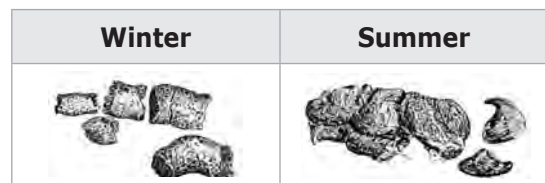
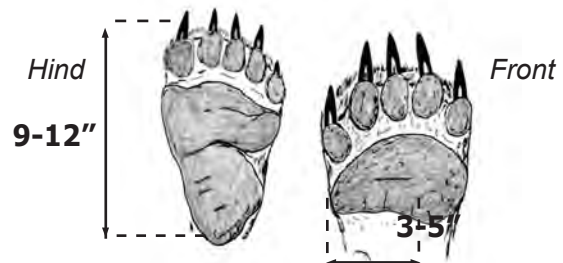
Like humans, brown bears consume a wide variety of foods. Common foods include berries, grasses, sedges, horsetails, cow parsnips, fish, ground squirrels and roots of many kinds of plants. In some parts of Alaska, brown bears have been shown to be capable predators of newborn moose and caribou. They can also kill and consume healthy adults of these species.

Brown bears have a keen sense of smell, sometimes detecting odors a mile away. Their hearing is also quite good and, contrary to myth; their eyesight is probably equivalent to that of humans. Brown bears tend to be solitary animals. Brown bears may gather in large numbers where food sources are concentrated, such as salmon runs.



Tracks

Brown bears have a larger track size. Toes are squeezed together with little to no spacing and do not form an arc.



Scat

Depending on the season or diet, it is possible to decipher what the bear ate from the undigested food evident in the scat.

Roosevelt Elk

Description

Elk are members of the deer family and share many physical traits with deer, moose and caribou. Distinguishing features include a large yellowish rump patch, a grayish to brownish body, and dark brown slender legs and neck. Male elk (bulls) have antlers, sweeping over the shoulders with spikes pointing forward. Alaska elk antlers have a tendency toward crowning, the formation of the three points at the end of each antler. The weight of an average bull elk on Afognak Island is approximately 1,300-pounds. Female elk (cows) are similar in appearance to bulls, but are smaller and have no antlers.

Habitat

Elk are found on Afognak and Raspberry islands near Kodiak and Etolin and Zarembo islands in southeast Alaska. They are mainly grazers, using grasses, forbs, and other leafy vegetation. Between the months of May and October, elk inhabit alpine areas and open muskegs. As summer progresses, elk bands move above timberline and feed on the alpine slopes where breezes keep biting insects at bay and young plants are highly nutritious.

The winter months are spent at lower elevations in the forests and small openings searching for sprouts and branches of shrubs and trees.

Behavior

Elk shed their antlers during the winter each year and grow new ones the following summer. The soft growing antler is covered with “velvet” which is scraped off by rubbing and jousting after the antlers harden in the fall.

Beginning in August, bands of elk congregate and form herds consisting of cows, calves, yearlings and an occasional mature bull. In September, bulls join the main herds and mating activities begin until mid-October. Elk herds may begin to disperse into smaller bands as they move into wintering areas.

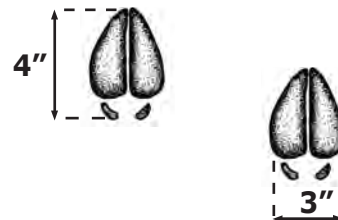


© Gary Lackie



Tracks

Elk hoof is larger and rounder than deer, and smaller than moose with a narrow gap within the inner hooves.



Winter	Summer

Scat

In winter, scat is dry and hard, forming elongated pellets. In summer, pellets begin to loose shape and form clumps of soft deformed pellets.

Sitka Deer

Description

The Sitka black-tailed deer is a small, stocky, and short-faced member of the mule deer group. Their antlers are red-brown with typical mule-deer branching. Normal adult antler development is three to four points (including the eye guard) on each side. Antlers are comparatively small. Male deer (bucks) weigh about 120-pounds in the fall, although dressed-weight bucks of over 200-pounds have been reported. Female deer (does) weigh about 80-pounds in the fall. The average life span of a Sitka black-tailed deer is about ten years, but a few are known to have attained an age of at least 15 years.

Habitat

The Sitka black-tailed deer is native to the wet coastal rain forests of Southeast Alaska. Its range has been expanded by transplants, and populations now exist near Yakutat, in Prince William Sound, and on Kodiak and Afognak islands. During the winter, deer congregate in low-elevation old growth forest below 1,500-feet in elevation. The old growth forest provides excellent year round habitat with branches to catch snow leaving browse available yet open enough to allow light to filter down to support plant growth.

Deer feed on blueberry twigs, bunchberry dogwood, and trailing bramble during the winter. During periods of deep snow, trees (red cedar, hemlock), lichen and even kelp are added to the diet. In spring, deer migrate to higher elevations and rebuild some of the fat reserves lost during the winter. In the summer, deer feed primarily on leafy vegetation, green herbs and shrubs.

Behavior

The breeding season peaks during late November. Bucks spend little time foraging and by late November have used up much of their fat reserve. However, does will enter December in prime condition. Does breed during their second year of life and continue producing fawns annually until they are 10 to 12 years of age.

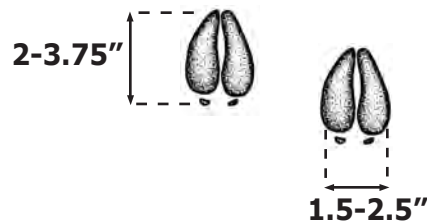


© Gary Lackie



Tracks

Two crescents shaped halves with two dewclaws. The tips leave a deeper impression in snow or on soft ground.



Late Summer



Scat

Depends on the season and food source. Pellet shape is directly related to the moisture content in the food. In winter, pellets are hard and dry.

Muskox

Description

The muskox is a stocky, long-haired animal with short legs and neck, and a slight shoulder hump. Both the male (bull) and female (cow) muskox have horns, however the horns of bulls are larger, and the base nearly spans the width of the entire forehead. Their coat consists of an outer layer of long, coarse hair, and an under layer of shorter very fine (hair) called quiviut.

Mature bulls are about 5-feet high at the shoulder and weigh 600- to 800-pounds. Cows are smaller, averaging approximately 4 feet in height and weighing 400- to 500-pounds



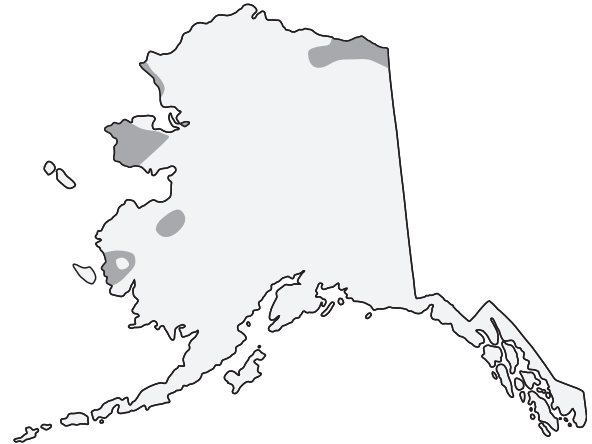
© Doug Lindstrand

Habitat

In 1990, approximately 2,220 free-ranging muskoxen resided in Alaska. They occur in herds on Nunivak Island, Nelson Island, north and northwestern Alaska, and on the Yukon-Kuskokwim Delta. In summer, muskox range widely eating a variety of grasses, forbs, and shrubs. In winter, muskox frequent windswept hilltops and slopes where vegetation is exposed.

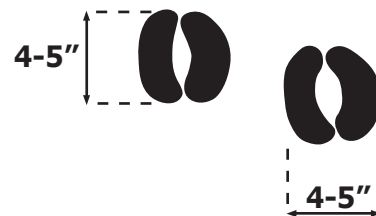
Behavior

Muskoxen are generally social animals that live in herds. Males may be solitary during the summer and travel long distances. The group defense formation muskoxen use in response to predators is well known. When danger approaches, they run together to face the source of the threat. If only one predator is nearby, the defense formation takes the form of a line. If several predators surround the group, the formation becomes a compact circle facing outward. Occasionally, one or more animals will charge the predator.



Tracks

Crescent shaped with front and rear contours so similar that direction of travel may be difficult to determine.



Winter



Scat

In winter, scat is dry and hard, forming elongated pellets. In summer, pellets begin to loose shape and form clumps of soft deformed pellets.

Plan Your Hunt Workbook

Complete each section of the hunt plan workbook. Before you begin this planning activity you should assemble the following materials:

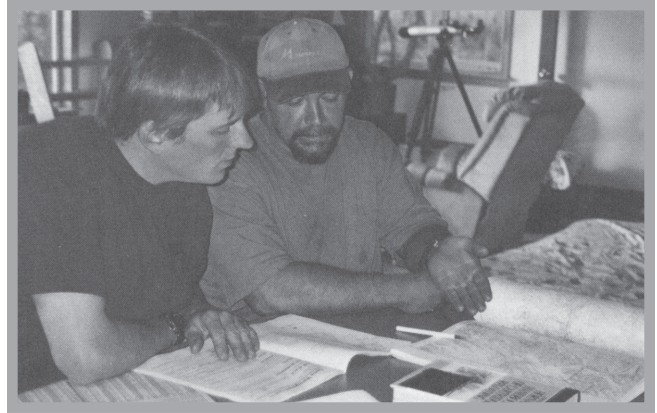
To have a safe and successful hunt it is essential to complete a hunt plan. For your convenience this workbook has perforated pages for you to tear-out your completed hunt plan and make copies for every member of your hunting party, family members, and others who may need to know your location and schedule.

A completed hunt plan will include a detailed travel plan. The hunt plan will also include the following checklists: camping and hunting equipment, meal plan and menus, clothing, and first-aid and survival materials.

- Calendar*
- Alaska atlas or topographic map*
- Hunting Licenses
- Permit applications and supplements*
- Harvest tickets and/or tags
- Contracts with guide and/or transporters

* Use these materials with the worksheets.

Remember, preparation for your hunt will involve getting into good physical condition, sighting-in your firearm or bow, practicing with your firearm or bow from hunting positions, testing every piece of equipment you plan to take, and efficiently packing for the trip.



**From this point on,
planning your hunt
is making
informed choices.**

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Hunt Planning

What Do I Want to Hunt and Where?

The Alaska Hunting Regulation book is organized by Game Management Unit (GMU). Each unit section contains all the regulations for species in that area, and any special regulations for that unit.

	1st Choice	2nd Choice	3rd Choice
Species & Sex:			
GMU & Specific Location:			
Season Dates:			
Regulations for GMU: (Page)			
Legal Animal: (Full curl or spike-fork 50; refer to the Alaska Hunt Regulation.)			
Land Access & Reporting: (Controlled accesses and requirements for harvest reporting refer to the Alaska Hunt Regulation.)			
Hunter Education Requirements: (Basic Hunter, Bowhunter, Muzzleloader)			
Costs: (License, tags, education, and/or permits)			

Travel Plans

Each time you plan a hunting trip, complete this form and leave a copy with at least two responsible adults who know what to do if you or your party members are overdue or missing. The individuals you leave this with should contact the Alaska State Troopers Search and Rescue Coordinator if you or your party members do not return from the field as scheduled. Attach a map of the area you will be hunting to this form.

Personal Information:

Name: _____
Address: _____
Phone: (Wk) _____ (Hm) _____ (Cell) _____
Birth Date: _____ / _____ / _____ Age: _____
month day year

In case of an emergency, contact:

1. Name: _____ Phone: _____
2. Name: _____ Phone: _____

Doctor Name _____ Phone: _____
Dentist Name: _____ Phone: _____

List any medications and/or medical concerns:

List survival training and experience:

Hunt Party Members:

#1. Name: _____ Phone: _____
Address: _____
Birth Date: _____ / _____ / _____ Age: _____
month day year
In case of an emergency contact:
Name: _____ Phone: _____
List any medications and/or medical concerns:

#2. Name: _____ Phone: _____
Address: _____
Birth Date: _____ / _____ / _____ Age: _____
month day year
In case of an emergency contact:
Name: _____ Phone: _____
List any medications and/or medical concerns:

#3. Name: _____ Phone: _____
Address: _____
Birth Date: _____ / _____ / _____ Age: _____
month day year
In case of an emergency contact:
Name: _____ Phone: _____
List any medications and/or medical concerns:

Travel & Equipment Information:

Date of departure: _____ Date of scheduled return: _____ Date of overdue return: _____

Commercial transporter: *(Attach itinerary)*

1. _____ 2. _____

Fill in the boxes for each Game Management Unit (GMU) you plan to hunt:

GMU:									
Arrival date:									
Departure date:									
Camp location: <i>(Write grid coordinates)</i>									
Communications:	<input type="checkbox"/> VHF radio	<input type="checkbox"/> Cellular	<input type="checkbox"/> Satellite	<input type="checkbox"/> VHF radio	<input type="checkbox"/> Cellular	<input type="checkbox"/> Satellite	<input type="checkbox"/> VHF radio	<input type="checkbox"/> Cellular	<input type="checkbox"/> Satellite
Outfitter/Guide: <i>(Name, address & phone)</i>	Name: Address: Phone:	Name: Address: Phone:	Name: Address: Phone:	Name: Address: Phone:	Name: Address: Phone:	Name: Address: Phone:	Name: Address: Phone:	Name: Address: Phone:	Name: Address: Phone:
Firearms taken: <i>(Type & quantity of ammunition)</i>	<input type="checkbox"/> Rifle: <input type="checkbox"/> Shotgun: <input type="checkbox"/> Handgun:	<input type="checkbox"/> Rifle: <input type="checkbox"/> Shotgun: <input type="checkbox"/> Handgun:	<input type="checkbox"/> Rifle: <input type="checkbox"/> Shotgun: <input type="checkbox"/> Handgun:	<input type="checkbox"/> Rifle: <input type="checkbox"/> Shotgun: <input type="checkbox"/> Handgun:	<input type="checkbox"/> Rifle: <input type="checkbox"/> Shotgun: <input type="checkbox"/> Handgun:	<input type="checkbox"/> Rifle: <input type="checkbox"/> Shotgun: <input type="checkbox"/> Handgun:	<input type="checkbox"/> Rifle: <input type="checkbox"/> Shotgun: <input type="checkbox"/> Handgun:	<input type="checkbox"/> Rifle: <input type="checkbox"/> Shotgun: <input type="checkbox"/> Handgun:	<input type="checkbox"/> Rifle: <input type="checkbox"/> Shotgun: <input type="checkbox"/> Handgun:
Method of travel while in the field: <i>(List make, model, color and license)</i>	<input type="checkbox"/> Aircraft: <input type="checkbox"/> Vehicle: <input type="checkbox"/> Boat: <input type="checkbox"/> ORV/Track vehicle: <input type="checkbox"/> Snowmachine:	<input type="checkbox"/> Aircraft: <input type="checkbox"/> Vehicle: <input type="checkbox"/> Boat: <input type="checkbox"/> ORV/Track vehicle: <input type="checkbox"/> Snowmachine:	<input type="checkbox"/> Aircraft: <input type="checkbox"/> Vehicle: <input type="checkbox"/> Boat: <input type="checkbox"/> ORV/Track vehicle: <input type="checkbox"/> Snowmachine:	<input type="checkbox"/> Aircraft: <input type="checkbox"/> Vehicle: <input type="checkbox"/> Boat: <input type="checkbox"/> ORV/Track vehicle: <input type="checkbox"/> Snowmachine:	<input type="checkbox"/> Aircraft: <input type="checkbox"/> Vehicle: <input type="checkbox"/> Boat: <input type="checkbox"/> ORV/Track vehicle: <input type="checkbox"/> Snowmachine:	<input type="checkbox"/> Aircraft: <input type="checkbox"/> Vehicle: <input type="checkbox"/> Boat: <input type="checkbox"/> ORV/Track vehicle: <input type="checkbox"/> Snowmachine:	<input type="checkbox"/> Aircraft: <input type="checkbox"/> Vehicle: <input type="checkbox"/> Boat: <input type="checkbox"/> ORV/Track vehicle: <input type="checkbox"/> Snowmachine:	<input type="checkbox"/> Aircraft: <input type="checkbox"/> Vehicle: <input type="checkbox"/> Boat: <input type="checkbox"/> ORV/Track vehicle: <input type="checkbox"/> Snowmachine:	<input type="checkbox"/> Aircraft: <input type="checkbox"/> Vehicle: <input type="checkbox"/> Boat: <input type="checkbox"/> ORV/Track vehicle: <input type="checkbox"/> Snowmachine:
List Equipment:	<i>(Complete and attach equipment list, meal plan, first-aid and survival lists)</i>								

When you return from your trip, discard this travel plan and all copies. A new travel plan should be completed each time you travel to assure the accuracy of the information. The time it takes to complete this plan could save your life and the lives of your hunting companions.

Equipment List

This list is designed to assist you in planning a successful hunt. As you plan and pack for your Alaskan hunt, check off the items you'll need and add those items not listed here. Remember, the type of travel mode will influence the type of equipment selected. It is important to make repairs and practice setting up your equipment before the hunt.

Do not pack your gear in hard-sided cases or luggage. Rigid objects do not pack well in a bush airplane, on an

Off-Road-Vehicle (ORV), or in a raft. Soft-sided waterproof bags are best for Alaskan hunting. Several small and medium sized bags are better than one or two large bags. To reduce duplication and weight, use only one size of battery for all appliances, and one type of petroleum fuel. Note, petroleum fuels have shipping restrictions when airplanes are involved. Ask airlines and air charter operators about transporting fuels.

Shelter and Housing:

- Dome Tent with Full Coverage Fly (Dome shape tents sheds wind and snow loads well, look for rectangular floor, tape and seal seams, and divide factory recommended capacity by 2.)
- Metal Stakes
- Floor Protector
- Tent Pole Repair Kit
- Visqueen 8-Mil or Nylon Tarp (8'x10')
- _____
- _____
- _____

Tools:

- Examples: Leatherman®, Gerber® and Schrade®
- Saw and/or Ax
- Duct Tape
- Allen & Torx wrenches
- _____
- _____
- _____
- _____
- _____

Equipment Maintenance

For a safe and successful hunt each piece of equipment must work properly when it is needed.

Preparing your equipment for a hunting trip should begin weeks before the hunt. Don't wait to the last minute and rush to pack all of your gear. Even if you don't forget something important you are still likely to pack flashlights with weak batteries, film that is out-of-date, a leaky tent, or a dull knife.

Use the gear list provided to help prepare for your hunt. Select the equipment you need based on the type of hunt: float hunting, pack-in, fly-in, or ORV. Once you have your customized list, assemble the equipment. Make sure every piece of equipment works. Clean sleeping bags and tents. Repair or reseal tent seams. Start your stove to make sure it isn't clogged up. Seal the seams of your boots, sharpen your knife, and wash your cook kit. Clean the lens of your rifle scope, binoculars and camera. If necessary repair clothing. If you need to replace a piece of gear, now is the time to shop and order equipment.

Check, clean and repair your gear at least two months before your hunt. Confidence in your equipment helps make a safe, successful and enjoyable hunt.

Spare Parts and Repair Kit:

- Buckle for pack
- Cotter pins for pack frame
- Needle
- Dental floss (waxed)

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Meat and Day Packs:

- Internal or external pack frame
(Large capacity of 5,000 cubic inches or larger for packing large loads and meat)
- Day pack (Large capacity of 2,000 cubic inches or larger for first-aid, survival kit, field dressing kit, and spare clothes.)

- _____
- _____
- _____
- _____
- _____
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- _____
- _____

Field Dressing Kit:

- Tarp or visqueen
- 3-pair latex gloves
- Sharpening tool
- 6-gauge bags (large size)
- Handy-wipes
- Citric acid and spray bottle
- Parachute cord (150')

- _____
- _____
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- _____
- _____
- _____
- _____
- _____

Spare Parts and Repair Kit:

- Topographical map (Laminated or stored in re-sealable plastic bags)
- Compass
- GPS with spare batteries (optional)
- _____
- _____
- _____
- _____

Sleeping Gear:

- Sleeping bag (Factory rated for -15 F filled with Polarguard®, Lite-Loft®, or Quilofill®)
- Bivy-sack® (for sleeping bag)
- Sleeping bag liner
- Therma-Rest® or closed-cell sleeping pad
- _____
- _____
- _____

Firearm, Cleaning Kit and Ammunition:

- Topographical map (Laminated or stored in re-sealable plastic bags)
- Compass
- GPS with spare batteries (optional)
- _____
- _____
- _____
- _____

Lighting:

- Lantern (candle or unleaded gas)
- Spare mantles
- Flashlight and/or head lamp
- Spare batteries and bulb
- _____
- _____
- _____
- _____

Toiletries:

- Towel
- Wash cloth
- Handi-wipes
- Personal hygiene material
- Soap
- Toilet paper
- _____
- _____

Optics:

- Binoculars (8- to 10-power)
- Spotting scope (15-, 20- or 45-power)
- Tripod
- Cleaning cloth and/or chamois
- _____
- _____
- _____
- _____

Meal Plans

Two simple rules apply to food carried on Alaskan hunting trips: (1) bring enough and (2) don't count on eating game meat. Bringing enough food means to pack meals high in caloric output for demanding field conditions. Additional food will also prepare you in the event that transportation does not arrive on schedule. Hunting in cool weather, hiking in difficult terrain, and packing heavy loads require more food than office work. Heavy and unseasonable snow and cold may force hunters to stay in the field for an extended period of time. In addition, aircraft delays of a day or two are common in Alaska.

Provided in this booklet is a daily menu form that should be used to plan the for the types and amount of food to be purchased for the hunt. Remember, the type of access will determine the types of foods to be purchased. Canned foods may be taken if traveling by car or boat. Dried foods are best if traveling by plane or hiking. Begin with the sample list, and continue to build your meal plan by using daily menus forms.

Cooking Shelter and Stove:

- Lean-to, baker-style shelter or miners-type single pole tent
- Cooking stove (with repair kit and jet cleaner)
- Stove pad (closed cell foam on snow)
- Fuel (unleaded gas)
- Tree cache (ropes, pulleys and bag for food)
- _____
- _____
- _____
- _____

Cooking and Food Storage Materials:

- Frying pan (light aluminum non-stick surface)
- Cooking pot (1-3 qt.)
- Plate, bowl and cup
- Eating utensils
- Matches (in waterproof case)
- Cleaning pad
- Biodegradable soap
- Nalgene® bottles
- Water filter
- Water purification tablets
- Drinking water (may need to carry drinking water if hunting in dry areas)
- Plastic trash or compactor bags
- Re-sealable plastic bags
- Thermos
- _____
- _____
- _____
- _____
- _____
- _____

Daily Menu

Day: <input type="text"/>	Food List	Cooking Utensils	Condiments
Breakfast			
Lunch			
Dinner			
Snacks			

Day: <input type="text"/>	Food List	Cooking Utensils	Condiments
Breakfast			
Lunch			
Dinner			
Snacks			

Clothes

Wilderness hunting demands proper clothing. Cotton has little application in most Alaskan hunting. Prepare for difficult weather conditions with synthetic fibers or wool. Wind and rain protection is critically important. Be sure your rain gear is up to the task. Some semi-permeable rain gear becomes porous when dirty. Mountain hunting

requires adequate footwear. You need sturdy boots that will protect your feet and provide good traction under difficult conditions. Dress in layers and add or subtract clothes as weather conditions change. Try to keep from over heating or getting cold.

Clothing:

- Wool or fleece pants
- Thermal underwear
- Socks (2 pair per day)
- Shirts (wool, Worsterlon®, fleece)
- Jacket and/or sweat shirt
- Windbreaker jacket and pants

- _____
- _____
- _____
- _____
- _____
- _____

Outdoor Clothing:

- Hat, cap, stocking cap or head sock
- Gloves
- Float vest or coat (depends on hunt conditions)
- Parka and bibs (with synthetic insulation and windblock fabric)
- Bug shirt or headnet
- Rain suit

- _____
- _____
- _____
- _____
- _____
- _____

Footgear:

- Camp Shoes*
- Aqua Seal® or Snow Seal® (for leather boots). Not for use on Gortex® boots as his treatment may interfere with breathability.
- Waders*, boots*, or Pacs®* (depends on hunt conditions)
- Spare laces
- Patching kit

- _____
- _____
- _____
- _____
- _____

(*Break in all footgear before trip.)

First Aid & Survival List

The gear from these two lists should be placed in a “never-leave-my-side” pack and go everywhere with you in the field. Even if you are taking a “short” stroll from camp.

First-Aid Gear Kit:

- Safety pins
- 2" wide ace bandage
- Finger tip and knuckle bandages
- 2-pair latex gloves
- Adhesive moleskin
- Scissors and razor blade
- Forceps and tweezers
- Resealable ½ gal. plastic bags
- 12-4x4" gauze pads
- Butterfly or steri-strips
- Roll adhesive tape
- Burn ointment or dressing
- ½ oz. Povidone-Iodine (10% solution)
- Adhesive second skin
- Bottle pain reliever (aspirin, ibuprofen, or acetaminophine)
- Syringe
- Dental temporary repair kit
- Neosporin® or Bacitracin
- Antibiotic Ointment®
- Kling Dressing (Coban®)
- 1-bottle hydrogen peroxide
- SAM Splint®
- _____
- _____
- _____
- _____
- _____

Survival Gear Kit:

- Saw
- Whistle
- Signal kit and mirror
- 2-flashlights (small)
- Strike-anywhere matches and butane lighter
- Spare batteries and bulbs
- Waterproof match case
- Metal match
- 18" square of closed cell foam
- Spare compass
- Small pot with high-energy food
- Pencil flares
- Multipurpose tool (examples: Leatherman®, Gerber® and Schrade®)
- Extra clothes
- Heavy-duty trash bag, space blanket, or space bag
- Fuel tablets
- Orange plastic sheet
- 1-roll surveyor flag tape
- Strobe (same size batteries as flashlight)
- Water filter or iodine tablets
- _____
- _____
- _____
- _____
- _____
- _____

Notes

Alaskan Hunting Bibliography

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Shadows on the Tundra: Alaskan Tales of Predator, Prey and Man, by Tom Walker. Stackpole. 1990.

Periodicals:

Alaska Hunter. Batin Communications Network. Fairbanks, AK. Published bi-monthly. (907) 455-8000

Alaska Magazine. Alaska Publishing Properties. Anchorage, AK. Published monthly. 1-800-288-5892

Alaska Outdoors. Alaska Outdoors Development Corp. Palmer, AK. Published monthly. (907) 349-2424

DVDs:

(Contact the Alaska Dept. of Fish and Game, Anchorage)

"Field Care of Big Game", by Alaska Dept. of Fish & Game. Demonstrates how to field dress big game.

"Is This Moose Legal?", by Alaska Dept. of Fish & Game. Educates public on spike-fork 50-inch antler restriction.

"Take A Closer Look", by Yukon Fish & Game Assoc. Educates public on how to judge trophy bears.

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(907) 465-2543
(Guide List)

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www.ak.blm.gov

Alaska Division of Tourism
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(907) 465-2010
www.dced.state.ak.us/tourism/

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www.fws.gov

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www.fs.fed.us

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www.nps.gov/aplic

U.S. Geological Survey
Earth Science Info. Center
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