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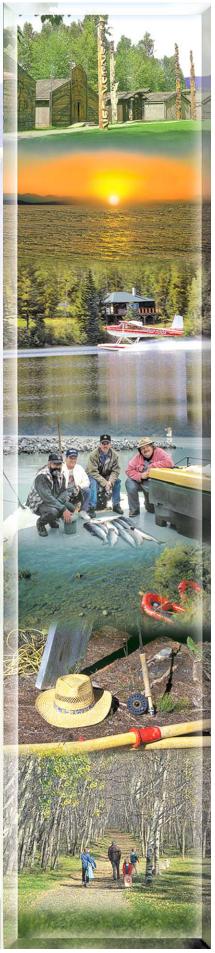
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**AUTUMN 2000** Volume 1, Number 1

### **DEPARTMENTS**

First Shot A sincere welcome to the world's first electronically published all hunting magazine

**₹** ♦ 37 **★ ₹** 

Game to Cook Fulfillment of the joy of the chase is reinforced by a well prepared recipe

Better Equipment Scent of human activity is one of quickest ways to chase away game, it can be avoided

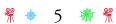
The Gun Room

Firearm safety has long been concern of hunters here are some new concepts on security



Cover: Most of us cut our teeth in the hunting world on deer and for the west that means mule deer. Photographer Neal Mishler has stalked them all and has some fine photographs to prove it, as shown on page one.

### **FEATURES**



Opportunities This Season An extensive look at hunting prospects species by species

> **₹** • 6 **★ ₹** Mule and Blacktail Deer

**₹** • 9 **★ ₹** 

Mule Deer in the West

Whitetail Deer

**₹** • 13 **★ ₹** Caribou

**%** • 14 **% %** Waterfowl

Elk

Mountain Sheep

Mountain Goats

**₹** • 24 **★ ₹** Grizzly Bear

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**₹ → 42 ★ ₹** Winter Issue



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Western Hunting is the world's first multimedia, electronically distributed hunting magazine, published four times a year (Spring, Summer, Fall and Winter) by the Interactive Broadcasting Corporation. It is delivered globally via the Internet at no cost to subscribers. Editorial coverage concentrates on western North America somewhat west of the 100th meridian.

Neither the publishers nor editor accept any responsibility for unsolicited material of any description. Editorial inquiries are welcome, in writing only.

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### FIRST SHOT



### AN EDITORIAL RAMBLE

reetings, and welcome to this, the first issue, of *Western Hunting*. All are welcome; avid hunters, occasional hunters, and non-hunters, there is something for everyone. As you have already realized this is the world's first electronically published hunting magazine. While it can be printed on your home printer and taken, as with any magazine, to be read in bed, it is much more than a regular magazine. It communicates by traditional means - reading, but also by sound through the audio links and by sight through the video links. Publishers Jim Matheson and Dave Prentice describe this whole as "a magazine on steroids."

Electronic publishing has many benefits for all of us, and a few drawbacks. One of the great benefits is the ability of *Western Hunting* to tackle topics in more depth thus the multi-faceted look at the upcoming hunting season in this issue. This season preview was written by five writers with extensive combined knowledge of hunting in western North America, but it is only the opening salvo of what future season previews will be.

Multi faceted features will become the norm for *Western Hunting*. These features will cover a number of aspects on a common theme. Our first attempt at this is to be found on our look at moose where we talk about the past, the present, and the future. In depth features on species will become a major part of our coverage and offer hunters the most up-to-date knowledge available.

These multi-faceted features will not only be geared to species. Our coverage of the new season, while perhaps too heavy on British Columbia, (our only excuse is that it is the center of home) also gives some idea of the multi-layered approach. The opportunities for serving the reader with such extended views of topics is endless.

Based in British Columbia, *Western Hunting* will cover hunting from the high Arctic to the tropics west of a hazy line somewhere around the 100<sup>th</sup> meridian of longitude. This is a daunting task in some ways, yet it is a natural development of the changes taking place in our more global society.

Worldwide, the greatest threat to wildlife is the spread of humankind. Western North America retains more publicly owned land than many people can comprehend. These two factors make the part of planet Earth covered by *Western Hunting* a key element in the 21<sup>st</sup> Century debate as to whether hunting, indeed wildlife in general, is to be a survivor into the 22<sup>nd</sup> Century and beyond.

In communication the electronic highway is the wave of the future, or so it appears at the moment. At *Western Hunting* we have a view of the future which suggests we can deliver hunting news cheaper, on a more timely basis, and in a manner acceptable to most hunters. All of those things, and more, are part of our pledge to all who hunt in western North America.

In future issues there will be space open to readers who care to write to the editor. Hunting is going through as much turmoil as any other topic aired on the public stage. There is more, much more, discussion to come and *Western Hunting* is a forum where hunters can put forward their views of how we are to retain wildlife and hunting into the 22<sup>nd</sup> Century.

Welcome to these pages, tell us what you like and we will try to get you more. Tell us what you don't like and we will try to fix it. With a little good will we will move forward together to create a new, responsible, voice for hunting and hunters in the West. In the meantime enjoy these pages today and in the future.

Henry L. Frew



### Despite the complaints there are new opportunities

s hunters travel further afield to pursue their game Western Hunting staff saw the need for a greater effort to be made in forecasting likely looking 'best bets' for your efforts. Many regional publications offer their interpretation of available regional data to forecast likely hunting prospects on a local basis. The following pages are the start of something different.

As a British Columbia based publication we have intimate knowledge of that area and this is reflected in the wealth of detail on the new season. As we discover hunter writers with personal expertise of species and locations further out from our base so the coverage

will become more detailed as is reflected in the pages on mule deer, waterfowl, and antelope, in this issue.

In British Columbia many of the most popular open seasons start on the first weekend after Labor Day. The most notable exceptions to this are some of the general open season in the northern Regions (6 and 7) where many seasons open in August.

There are few changes of a major nature to the province as a whole. What was the Thompson-Nicola and Okanagan Regions (Region 3 and Region 8) is now know as the Southern Interior Region, but as the Management Units (MU's) numbering system has not changed we will still deal with it in *Western Hunting* as two Regions.

Young waterfowl hunters have a new opportunity this year with the introduction of Waterfowler Heritage Days



(WHDs). These special openings will be in Regions 1, 2, 4, 5 and 6 for the hunting of ducks and geese.

Only hunters between the ages of 10 and 18 years will be allowed to participate in WHDs. These young hunters must meet all provincial requirements and be accompanied by a licensed adult hunter.

In Region 3 there will be a new opportunity for young hunters (under 19). Both mule and whitetail bucks will be open to young hunters in MU's 3-12 to 3-14, 3-17 to 3-31 and 3-34 to 3-44 as of Sep.1. A new bow season will be open in the same MU's also as of Sep.1.

In Region 4 the 3-points bull elk bow season is changed to a season for any bull elk and is expanded to include MU's 4-07, 4-19 and 4-27 to 4-31.

In Region 5 a new opportunity for whitetail hunters starts Sep.10 in MU's 5-01, 5-02, 5-13 and 5-14. The Dec.1

bow season for mule deer bucks is expanded to include MU's 5-04 to 5-06.

Mule deer buck season In Region 6 MU's 6-04 to 6-06, 6-08 and 6-09 will be replaced by a 4-points plus buck season opening Sep.10 followed by an any buck season Oct. 1 and another 4-point buck season Oct.20.

We at Western Hunting cannot emphasis strongly enough how important it is that every hunter obtain a copy of the 2000-2001 Hunting and Trapping Regulations Synopsis. This booklet is available province wide at all your usual sellers of hunting licenses and species tags.

Read all the general information in the Synopsis with great care. Read all the details on the species you intend to hunt, in the Region you intend to hunt it, paying particular attention to opening and closing dates and class, age, and sex, of the animals open to hunters.

Each hunter carries a responsibility, not only to him or her self but also, to hunting past, present, and future. That responsibility encompasses a wide array of topics and circumstances. We must be fully aware of all the laws, rules, and regulation in the area hunted, which affect you, and must be aware of the perception of others to these same laws, rules and regulations. Such proactive awareness will lead to a secure enjoyment of, not only this season but also, hunting for many years to come.

Have a great, safe, and enjoyable hunting season and make full use of the information offered in the next few pages to enhance your hunting experiences.



cross the province of British Columbia there is nothing that will start an argument quicker among deer hunters than to mention mule deer population figures. When you bring the variations, Columbia blacktail, into the discussion the volume is turned up yet again.

On Vancouver Island, the major part of Region 1, blacktail deer show little sign of recovery from their horrific population collapse. Many things played a part in the disaster, habitat changes, increased predation, especially the return of the wolf to Vancouver Island in a big way, being two of the major causes, but there are other factors.

Good numbers of animals were harvested historically with some 23,000 animals taken in 1967, By 1987 that figure had dropped to some 6,700 animals.

Region head of wildlife Doug Janz is optimistic that the numbers have bottomed out on Vancouver Island and that the rebuilding process has begun. Certainly in suburban areas around many of the Island towns there are obvious signs of good deer numbers, unfortunately most are in areas where the discharge of firearms is restricted by municipal bylaws.

Despite all the doom and gloom there are those who still take their annual buck for the freezer from the Island herd. They are the hunters who know their patch of the Island intimately and have reconnoitered well before opening day.

Much of Region 2 had little in the way of snow last winter and this is reflected in the carry-over of blacktail deer. The only drawback is that in some MU's, particularly 2-9 through 2-11, there are signs of heavy wolf predation.

There are no LEH opportunities for antlerless deer as there were in the past. A mixture of things are behind this. The Wildlife Branch gathered all the data it needed on herd age statistics and hunter success rate was extremely low. One of the reasons for the low success rate was felt to be the few opportunities to hunt this region in the snow. And hunting in the coastal rainforest in the cold and soaking wet palls in short order.

All deer wintered well in Region 3 with many deer staying higher on the mountains all winter than for many years past.





Residents have seen doe permits reduced by half in the last two seasons as the Wildlife Branch stabilize the numbers and rebuild the big buck ratios in some areas.

Much of Region 3 has openings for four-point, or better, bucks but you have to pay particular attention to the where and when of the openings.

Region 4 is being looked at from a more conservative point of view by the managers. They look upon the recovery from the bad years of 1995-97 as not being as good as hoped but this is not being helped in some MU's where predation is heavier than normal. Four point or better bucks looks like being the norm for the Kootenay country for the near future.

Despite the conservation efforts of manager Bob Forbes and his staff they are able to continue with a bow season in early September. In addition there is some part of Region 4, which has an open season on bucks from Sep.10 to Nov.15.

Mule (black-tailed)
deer - four points or
better means any buck
having at least four tines,
excluding the brow tine,
on one antler.

In the Cariboo the mild winter meant a good carry over of animals for Region 5. Despite high wolf counts in some parts section wildlife chief John Youds believes the mule deer prospects will be at least as good as last year.

Bow hunters are well catered to in the Cariboo with no less than three archery only openings between early September and the end of the year. General open seasons, mainly for four point or better, run from Sep.1 through November 30, check the MU of choice.

Last winter was kind to Region 6 with carry over of mule deer being well ahead

of average according to Sean Sharpe, the regional wildlife section head. Over most of the Region the species is considered to be abundant and hunter opportunity should be good this season.

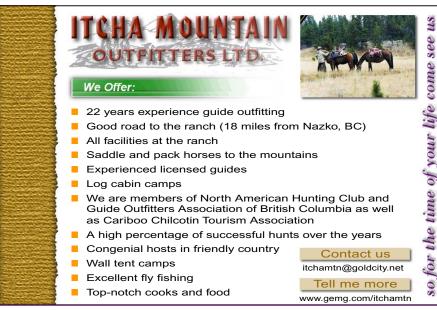
Despite whitetail moving into, and spreading within, the Region there is no sign yet of displacement of mule deer. In fact mule deer still remain the greatest hunting opportunity in Region 6.

Bow hunters get two opportunities in Skeena with an archery only opening for 10 days in early September and then again for another 10 days at the end of November. Then there are MU's with regular open seasons in Region 6 from Sep.10 to Nov.20. The Queen Charlotte Islands MU's 6-12 and 6-13 are special cases with their own problems and their own management regimes.

In the Omineca area of the province, Wildlife Management Region 7(A) mule deer are not considered a big deal. Way



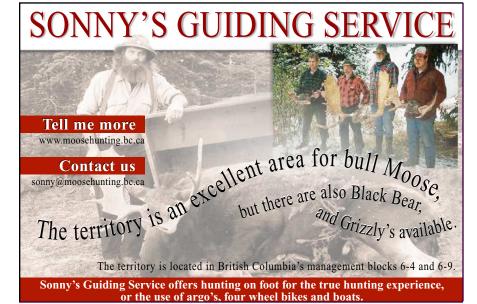




back in 1967 some 1,600 animals were killed. That dropped to a low of 117 in 1976 then slowly crept back up to around 500. Few people even want to talk about mule deer in the Region.

Region 7(B) the Peace/Liard area harvest some 1,000 mule deer in 1967. Since then the number went down to 112 in 1976 but has risen above 2,000 in the 1990's.

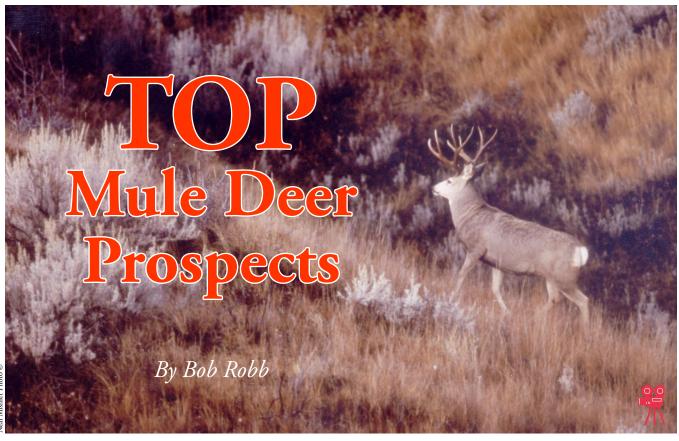
Deer licence
entitlement - A person
must not possess more
than 10 of any
current deer licences.
The combination of
deer licences may
include a maximum
of three mule deer
and/or three
white-tailed
deer licences.



One of the better traditional regions for mule deer Region 8 has also suffered from ups and downs. Historically the harvest was over 10,000 in 1967 with a rapid decline to just over 1,800 in 1976. Then they climbed back to just under the 10,000 in the early 1990's. Then came the winter of '96.

Surviving the '96 knock back the population has been growing and another mild winter last winter has really helped things along. This year will have reasonable opportunity with bow seasons in early September and again in late Nov. through early Dec. The general seasons for four-point or better will cover the period Sep.10 - Nov.10.





f there's one thing I've learned about big-game hunting over the years, it's that, no matter how badly you want to, you can't shoot an animal if it isn't there. When planning your hunt, keep in mind that a lot of states and provinces are going to giving out some form of 'guaranteed' tags. That can be 'X' number of tags guaranteed each year to a certain guide or outfitter, a landowner, and so on. Buying one of these tags is the best way there is to ensure you will be able to hunt the best areas during the best seasons, if you're willing to go guided. That's one way to beat the system. However, there are still some excellent hunts on public land yielding some dandy bucks for the hunter who is willing to pay his dues by researching, scouting, and hunting hard. The limited-entry tags are gold in the right areas, if you can draw them.

**Arizona**: All units north of the Colorado River, including the Kaibab Plateau and Arizona Strip, have big buck potential. The Kaibab is coming back following several slow years, but is a very weather-dependent unit. That is, following years

of severe drought you have a lower overall deer population because of lower fawn recruitment. But with 3-4 years of good moisture in a row, that means that 3-4 years after that it's the time to hunt, as there will be good numbers of mature bucks available.

Colorado: The state's northwest corner is an area that's seeing a real comeback in the number of good bucks being seen each year. Also, on the state's eastern plains from the northeast to southeast has relatively low mule deer densities, but some dandy bucks. It typically takes 1-5 years to draw, and most of the better hunting is on private land. The December 1-15 hunt is the best hunt here, as the rut is on and it can be dynamite.

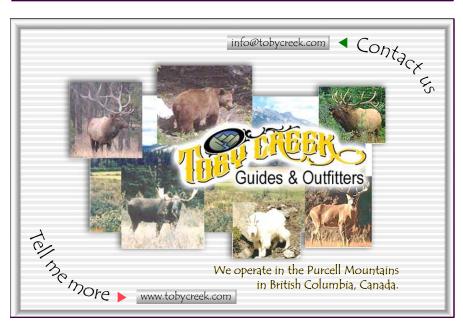
Idaho: Generally speaking, the southern half of state and its handful of November rifle buck tags can be really good tags for some huge non-typicals. There are bucks scoring over 230 Boone & Crockett points being killed on these hunts from time to time. Those deer are migrating to the winter range during the rut, and not resident deer.

**Montana:** This is the only state left where you can hunt mule deer during the rut on a general deer license. The result is that in many areas, particularly west of the Continental Divide, the deer have been hammered, buck-to-doe ratios are very low, and trophy bucks are extremely rare. Montana's best mule deer hunting occurs in the state's southeastern quadrant, in Region 7, primarily because the best mule deer habitat is found on private land and the landowners can conduct their own management programs by limiting hunter access. In Montana, finding a buck that scores more than 185 Boone & Crockett points is rare today.

**Nevada:** The entire state is very good for mule deer hunting because that state has forced everyone, including residents, to draw for every available mule deer tag. Just about every unit has the potential to produce a book typical and giant non-typical muley.

**Oregon:** Oregon is a real sleeper state for trophy mule deer hunting. Why? Because the state offers no rifle rut hunts, and the deer are so scattered they're not







getting concentrated hunting pressure. The eastern half of the state is very good, and can produce some fantastic bucks. The best units for big muleys include the Beulah, Malheur River, Juniper, Steens Mountain, and Trout Creek units, as well as Lookout Mountain.

**Utah:** Utah is one of those states that has excellent genetics but has been managed for maximum hunter opportunity rather than quality. Hence, finding trophy-class bucks in Utah is tough to do. The best chances occur on private ranches, and those tags cost an arm and a leg. The best-known trophy buck units in Utah are in the southern part of the state -- the San Juan Elk Ridge and Paunsaugunt units.

**Wyoming:** It is not as good a mule deer state as it has been in the past; however, the state does produce some real dandies every year. Regions G & H, in the high country and during the early September hunts, can be good, but you need

### Being in a draw for tags is best insurance

to be a strong backpacker or have horses to hunt them effectively. There are some Nov. 1-15 rifle hunts are available limited basis, and good deer are taken during these hunts, too.

"Other" Trophy Muley Areas: Big bucks are, as they say, where you find them. To that end, some areas that you might not think of as producing trophy muleys are doing just that these days. Places like western Kansas and western Texas have been producing some great muleys in recent years. However, hunting opportunity for non-residents is very limited. Researching these states just might open your eyes to a potential trophy mule deer hunt you just can't let get past you. Sonora, Mexico is a place I've hunted several times for mule deer, and the place I've taken my two best bucks ever. One is a heavy, typical-framed 6x7 with a 37-inch outside spread. The other is a non-typical with 34 1/2-inch outside spread, 16 scorable points and scores 243 Boone & Crockett points despite having his left G-2 and right eye guard broken off. They are both true monster bucks.





ne of many things receiving little general publicity is the growth in whitetail deer numbers and distribution in British Columbia. Long considered a foreign deer by British Columbia deer hunters the whitetail is coming into its own as a deer of choice for many.

So far there are no reports of whitetail deer on Vancouver Island or the southern Gulf Islands. Only rumor says there are any in the Lower Mainland so neither Regions 1 or 2 have whitetail seasons.

All deer wintered well in Region 3 with many mule deer staying higher on the mountains all winter than for many years past, leaving the lower, agricultural, land for whitetails. Numbers are steadily increasing, as is the distribution of whitetail throughout the region. Management Units 3-18, 3-19,3-27 and 3-28 have all shown particular growth in whitetail opportunity.

Regional wildlife biologist Doug Jury states that if the whitetail population continues the trends of the last ten years for the next ten then Region 3 will have a significant population worthy of any deer hunters' attention.

Kootenay country, Region 4, is the bonanza belt for whitetail deer hunters. Regional wildlife head, Bob Forbes, is enthusiastic about whitetail prospects for this season. Since the disastrous 1996 winter Forbes and his staff have worked hard at rebuilding all ungulate populations in the Region and the results are there to be seen in the increase of the whitetail population.



Good survival rates in Region 5, combined with steadily increasing numbers, Makes regional wildlife chief John Youds optimistic for the future. Region 5 is going to have a Cariboo Plateau opening for whitetail this year for the first time ever. The area to open is Highway 24 north through 100 Mile, Williams Lake, and west to Alexis Creek, north to Quesnel and northwest to the eastern watershed of the West Road, MU's 5-1, 5-2, 5-14, and 5-13.

"Sneaking in" is how regional wildlife section head Sean Sharpe describes the expansion of whitetail in Region 6. They are slowly but surely colonizing the pockets of agricultural land in the Region and their numbers show slow but steady increase.

Sharpe says there is no sign of whitetail displacing mule deer in the Region. In fact the whitetail population is by far the deer family minority in Region 6 and the lesser of the two in hunting opportunity, by a considerable margin.

Despite the strength of mule deer in Skeena deer hunting circles Region 6 has a ten-day archery only season in early September with a an open season on bucks from mid-September to the end of November.

In Region 7 the regional wildlife chief for the Omineca, Doug Heard, says there is a debate at the moment among the whitetail enthusiasts in the Region as to how well the population is doing. Heard feels it most likely that the population is increasing and this is reflected in the ten-day archery season followed by a two-month season on bucks.

From the northeastern half of Region 7, the Peace country, comes more doom and gloom in that many of the whitetail experts say the population has not recovered from the 1996-97 winter. But our writer from Alberta, Wayne Norstrom, is not in full agreement with that position (see his piece on whitetail prospects in Alberta) In addition there is still a three-week bow-only season plus a three-week general season.

There are some great opportunities in Region 8 if you know where to go. A two-month open season combined with a few mild seasons has created some great chances for those who plan well.

### **Alberta Trophy Whitetails**

By Wayne Norstrom

Then hunters talk about Alberta the subject is usually whitetails and sheep. Big whitetails and big sheep, and rightfully so because over the past few years a lot of Alberta's whitetails and sheep are showing up in the record books That's history, how does it look for the coming year? The whitetail numbers still seem to be down some from the winter of 1996 - 1997. Writing that, the numbers are still good, and the population fluctuations are spotty with good numbers in one area and a slower rebound in a neighboring area. This is probably due to better habitat conditions during the tough winter.

As far as trophy status is concerned almost anywhere in the province that has whitetails has trophy whitetails. I personally know of B & C caliber heads coming from the Peace River country in the north to the Montana border in the south. The central part of Alberta along the Saskatchewan border has always produced some big heads and that trend seems to continue. And lately I'm seeing some really big heads coming from that agriculture forest fringe in the western part of the province.

And for better conditions a person has

to look no further then the proximity of

domestic crops to good cover.

To my way of thinking the northern parts of the whitetails' range produces the best heads on average. And I believe it's because the area has excellent plant growth, thus nutrients throughout antler development. A lot of northern farmers grow forage crops which doesn't hurt antler development one bit. When I'm up north I see lots of green hills rich with new green growth into August whereas further south everything can be brown by early July.

The tougher winters, and greater threat of predation, are the down sides to northern whitetails.

Some of the wildlife people I have spoken with suggest the trophy quality in some of the areas hasn't recovered from the tough winter of 1996 - 1997 however a series of mild winters should turn that around and this will be the fourth season since the tough winter. And certainly the record books prove they are still out there.

Rumor abounds over whitetail in British Columbia, how far they are spreading, where they will be seen next, and are they the deer of the future?



### Caribou herds troubled

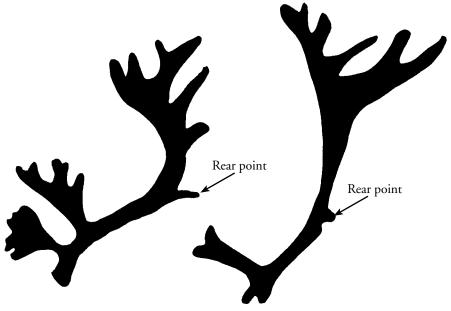
In British Columbia caribou in the southern herds are in trouble while those in the north appear to be at least stable. The problems in the south are just one more instance of people pressure.

Recent pronouncements of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) blew the whistle on the status of much of the B.C. caribou. COSEWIC has listed all caribou in Kootenay, Thompson, Okanagan, Cari-

boo and Omineca. This shows an overlap in the CDC and COSEWIC listings over all of these later areas.

Open seasons this year may well be closed in the near future as the wildlife managers try to find solutions to problems created primarily by the greed and expansion of human activity. But for this year Region 5 (Cariboo) has an opening for mature bulls only from Sep.1 to Oct.15.

In Skeena Region there is an opening



To be classed as a mature bull caribou the animal has a main beam which is at least 75cm (30-inches) in length or one antler which bears five tines (points) including the tip of the main beam above the rear point. If the rear point is missing the first rear facing point will be used as rear point.

boo, and parts of Omineca, Peace, and Skeena, as nationally threatened.

To add to the warnings from COSE-WIC the British Columbia Conservation

### All caribou taken must be inspected within 15 days

Data Center (CDC) has placed the mountain caribou on the provincial red list. The red list is the list that includes all candidates for formal classification as Threatened or Endangered.

These red listed mountain caribou cover all caribou in the Kootenays, Thompson, Okanagan, and eastern parts of the Carifor five-point, or better, bulls in MU's 6-17 to 6-20 and 6-22 to 6-27 from Aug.15 to Oct.10. Parts of MU's 6-19, 6-20, 6-25, and 6-26 are open on LEH only.

Caribou in Region 7A (Omineca) have an opening for five-point, or better, bulls Aug.15 to Oct.15. This open season is in MU's 7-30, and &-37 through 7-41.

To the east, In Region 7B (Peace) there are more opportunities. There is a bow only season in MU 7-58 for five-point or better bulls from Sep.1 to Sep.30.

For general open seasons there is an any bull opening Aug.20 to Aug.31 in some 12 MU's. There is a five-point or better opening in 11 MU's from Sep. to Sep.30.

For all caribou hunting a close check of all regulations, MU by MU, is required.





### Waterfowl Opportunities Outstanding



Story and pictures by Bill Otway



the stories of bygone days, but few have seen the numbers of wildfowl to be seen in the skies of Western North America today. Populations of all species of geese, and many species of ducks, are at record highs.

These waterfowl numbers, combined with increased daily and possession bag limits, are being chased by the smallest number of hunters in many years.

Prairie grain field wildfowling is in a class by itself with its own highs and pitfalls

All this works together to produce memorable hunts for those willing to make the effort.

I will be dealing only with Alberta and Saskatchewan, as these are the Prairie Provinces I know best. Interested hunters should not overlook Manitoba however; bird numbers, generous bag limits and little competition apply there as well. British Columbia also deserves a look. It is a different kind of waterfowl hunting but rewarding none the less. All the western provinces have reinstated historically generous limits, including British Columbia.

While no one is required to use a guide when hunting migratory birds in any of the four western provinces, a good guide ensures you have maximum chances for success and also eliminates some equipment requirement and a



major part of the work on a hunt. I have hunted both with and without guides over the years. If one can manage it, with is much preferable. That is not to say good hunts cannot be had without a guide, because they can.

September sees the start of the season in Alberta and for best results you should look North to the Peace River area, center out of Grande Prairie, Fairview and Grimshaw. On opening day I would consider even further north, in and around La Crete. As you move into the latter part of September look south in and around the Edmonton area and even further south and east out of Hanna. While the primary target is geese in these areas, ducks abound and a good plan is a morning goose hunt coupled with an afternoon duck foray. That is if you have not bagged your duck limit before the geese start to fly in the morning, an experience which is not unusual.

The Camrose /Stettler area is primarily noted for it's great duck hunting but the numbers of geese are increasing in this area and it is always worth considering. October Mallard hunting in this region can be awesome and has to be experienced to be appreciated.

For late October and November you should set your sights further south in the



Warm clothing is an essential for Prairies hunting but with results such as these most people are willing to make the needed effort

Brooks, Taber, Bassano areas. Both geese and ducks are available and memorable hunts are the order of the day.

The season is open until Christmas and late season opportunities should not be neglected. Late November and December can see great concentrations of both ducks and geese in the open water in the Pincher Creek area, in and around the

river bottoms. You have to dress for the weather, but the tremendous shooting will ensure the cold is no more than a minor irritant. In recent years, the falls have been warm and open well into November. While you cannot count on this, you should be prepared to take advantage of it. At this time of year your targets will be primarily Canada Geese and Mallards. What more could one ask?

Alberta is known far and wide as a fabulous goose and duck hunting area. Few people however, are aware of the late season opportunities.

Saskatchewan is the goose hunter's Mecca. Ducks abound but geese are the drawing card. The burgeoning populations of snow geese have resulted in daily limits of 20 of this species with a three-day possession. Add to this a dark goose daily limit of eight, five of which can be "white fronts or specs". The possession limit is 16 and the combination gives you a possible hunt limit of 76 geese. Then you add the ducks at 8 per day 16 possession and you have numbers that set the juices flowing in even the most blase' of hunters.

As in Alberta, the season for both ducks and geese begins in September. Also, as in Alberta, while good shooting can be had at this time of the year throughout most

### Alberta Waterfowl Update

Waterfowl, especially geese, look real good. I have a preliminary waterfowl report for the province. The Peace Country has better than average pair numbers, however there is concern about adequate brood cover and water because of the drought (they have received a big rain since the survey). The good numbers up north may be because of the dry southern conditions resulting in birds moving north.

The parkland remains near the longtime average for ducks and Canada goose numbers are continuing to increase. It's drier

here but they have had rain since the survey.

The south is dry and nesting opportunities are generally limited to the irrigation district. There has been no rain in southern Alberta this spring.

Overall hunting opportunities for waterfowl this fall should be very good especially for geese. That area along the Alberta - Saskatchewan border around Hanna is always a good bet.

From Wayne Norstrom



of the province, the further north you go, the better your odds. In most cases it is the difference between good and great and we all like great, right!

Key areas for the early season would be anywhere along a line from Lloydminster through Melfort. For late September through to late October you begin to move south with the birds. A good rule of thumb is about 100 miles a week (this rule can be equally applied to Alberta as well). Unity, Biggar, Hoosier, Kindersley, Cabri and down through Swift Current in the western part of the province are all good bets. In the central province, the Saskatoon area, Outlook, Moose Jaw, Old Wives Lake and Watrus are worth considering. For the eastern part of the province try Wynyard, Quill Lakes, Wadena, Foam Lake or Fort Qu'Appele and you won't be disappointed. And for real late season opportunities, November on, keep the South Saskatchewan River between Leader and Cabri in mind.

While all of these and more, (I have only scratched the surface here) are prime goose areas, all also present good to superb duck opportunities. In many areas there is also the chance for a bonus hunt for Sandhill Cranes, bag limit 5 daily.

In Alberta I have hunted both ducks and geese with outfitters in the Bittern Lake/Camrose area and with friends north

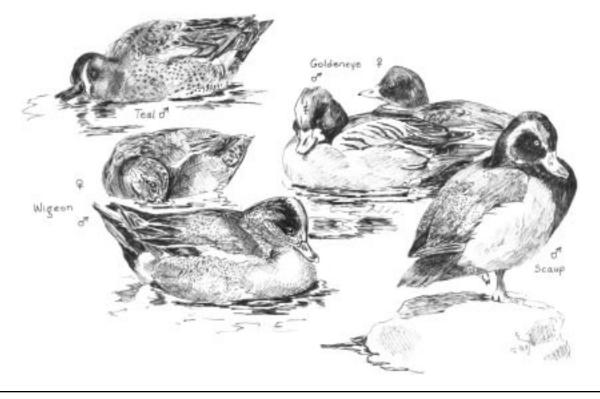


A mixed bag of Canada's, blues, and white snow geese reflect a wondrous day on the stubble

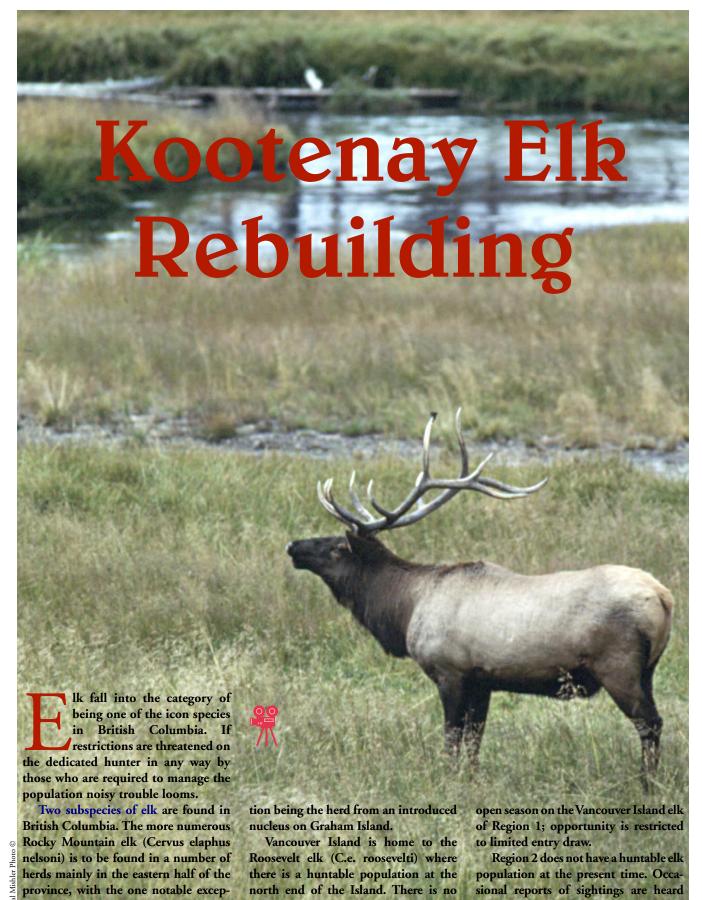
and east of Edmonton and in and around Bassano. In Saskatchewan I have had professional guide assistance in the Hoosier, Cabri and Foam Lake areas. Friends assisted in hunts out of Port Reeves, Swift Current and Moose Jaw. I have never had a disappointing or bad hunt in either province in any of these areas.

Outfitters I know and can recommend in Alberta are: Bittern Lake Outfitters (780) 975-6209 and Ongaro Outdoors 1 800 465-6227. In Saskatchewan, Central Flyway Outfitters out of Hoosier – (604) 538-0825, Spring Water Outfitters - Honker Hilton out of Cabri – (306) 678-4509 and Ralph Holowaty Outfitters, Foam Lake (306) 272-4361. For a full list of outfitters and regulations and licence information you can contact Alberta Wildlife through: http://www.gov.ab.ca/env/fw/hunting/index. For Saskatchewan http://www.serm.gov.sk.ca/fishwild/licence/. And for Manitoba http://www.gov.mb.ca/natres/wildlife/.

If you have not tried a prairie waterfowl hunt, try it, believe me, you'll like it.









of in unusual places and elk hunters keep their fingers crossed for the distant future.

There is no elk season in Region 3 with the elk population barely holding its own. Much of the problem must be put down to the unregulated and unrecorded harvest of elk.

Elk populations are steadily increasing in Region 4. This has occurred after much acrimonious debate over the last few years with the wildlife managers having to waste their time fighting dirty politics instead of concentrating on game management.

In the general season in Region 4 the 'six-point or better' rule has been a great success. Kootenay elk populations for this

year are in the 16,000 to 20,000 range. Along with careful hunting access management has gone some successful habitat enhancement. By the end of this year mainly controlled burns will have treated some 2,500 hectares.

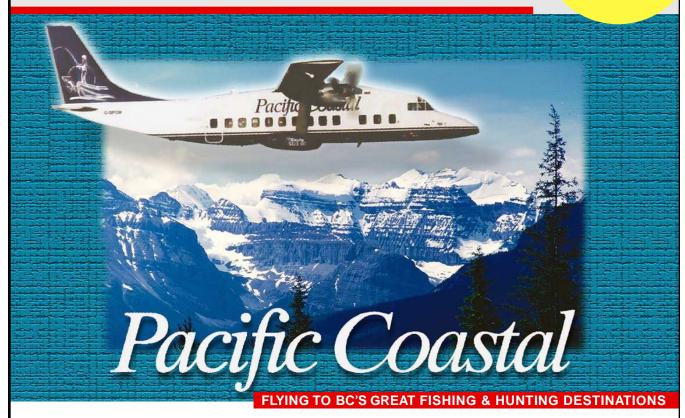
Regional wildlife chief Bob Forbes is looking forward to more liberal access on LEH for elk in Region 4. When? "Within the next three years" Forbes suggests. But the Region is likely to stick with six-point bulls in the general open season for the foreseeable future.

There is a ten-day archery only season in early September. The main open season for the six-point or better bulls runs from Sep.10 to Oct.20.

Complaints about elk in conflict with agricultural interests continue to plague parts of Region 4. In response there are some interesting openings for the young elk hunter, and the not-so-young hunter. Five pockets of private land are open to LEH permit holders under 19-years or over 65-years who have obtained the written permission of the landowners.

These five areas, all within MU's 4-02 or 4-03 will be open to take a cow or calf only between Sep.1 and Oct.15. For the first nine days, Sep.1 to Sep.9 these openings will be for the use of archery equipment only.





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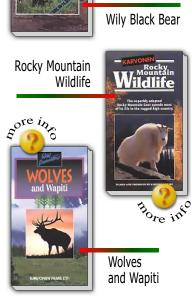
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Region 5 does not have a huntable elk population.

Elk hunting in Region 6 is confined to the northern islands of the Queen Charlotte's where a few bulls are taken each year. This opening is from Sep.15 to Nov.15 and is confined to bulls only. Populations continue to grow else where in the Region but so far none have grown enough to offer a hunting opportunity.

As an example, the herd in the Smithers area has reached a steady 40-50 animals and now it is necessary to wait and see if the predators can leave them alone enough to show a considerable increase over the next decade.

While Region 7(A) boosts itself as the moose factory of B.C. it has one MU

### Elk prospects are improving throughout British Columbia

with an open season on six-point or better bulls. This is MU 7-41 in the north of the Region and east of the Finlay River. Few elk are ever harvested in the Region with 1968 being a banner year when 22 were taken. There were many years when no animals were killed and decades where the annual hunter kill could be counted on one hand.

There is a better picture from Region 7(B), the Peace/Liard district, but neither is it the elk haven of North America. Over the last three decades the annual harvest ranged from a high of just over 600 to a low of less than 100.

Despite these harvest results most of the Region is deemed to have harvestable populations with some MU's opening Aug.15 and there being opportunity right through to Oct.31. Two MU's are three point or better while the rest of the open areas are six-point or better.

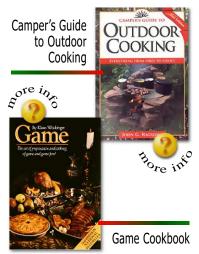
Six-point or better bull seasons are open in Region 8, most of them Sep.10 to Oct.20, some MU's don't open before Sep.25, but close Oct.20. In the Okanagan numbers are improving according to all reports as are sex ratios all boding well for the future.



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## BIG Rams in Alberta

By Wayne Norstrom



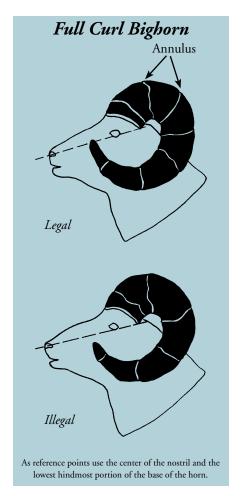
been in the spotlight the past few years as rams of over 200 B & C enter the books. All these big rams create excitement, however I for one think a good legal ram is an excellent trophy and Alberta is still producing these good quality heads.

The Cadomin area south of Hinton has been producing all the giant heads. It has seen a lot of hunting pressure over the years, however rams coming off the mine site (which is closed to hunting) or out of Jasper National Park produce some excellent trophies. I can understand why some huge sheep are coming from the area. Certainly the gene pool is there; however, it's my opinion that the enhanced forage from the reclamation at the mine has added inches to those horns. I was hunting there in late October and I could actually smell smoke coming from some of the old slag piles. There was 8 - 10 inches of snow on the ground, however, when I kicked it aside there was green clover. That fresh food source that late into the year has to help horn growth.

The entire sheep range of Alberta produces rams and good quality hunting. The northern rams generally are lighter based and tighter curled than the rams further south. What I find strange is the fact that the southernmost wildlife management unit, WMU 400, hasn't produced a ram for four years. This in spite of the fact that it's the home of the world record bighorn. The unit was made full

curl in 1996 and it was expected to produce some quality heads. To date that hasn't occurred, and no one seems to agree why.

For sheep good winters mean good lamb crops, but some of the herds have not carried these good numbers into winter. Many hunters are pointing fingers at increased depredation, however, it's more likely a combination of factors which include predation.



### Seesaw in Sheep Stocks

ountain sheep are susceptible to many problems, and somewhere in British Columbia one or more of its enemies is challenging some band. Disease stalks the pastures where they neighbor domesticated animals, or the ground is excessively grazed from whatever type of overstocking. Forest has taken over where wildfires historically kept the mountain pastures open for grazing. Predators have increased their numbers greatly in the last 20 years and this is reflected in sheep losses

When all the foregoing is taken into account there are still many bands of sheep in good to excellent shape with good lamb ratios and a growing population. One of the icon animals in the province, mountain sheep need the expert management they have enjoyed in the last few decades.

of the fact that it's the home of the world record bighorn. The unit was made full for sheep hunters. Some people talk about

sheep on the eastern edge of Region 2, when they do someone in the crowd always asks what they have been smoking.

In Region 3 the sheep are starting to come back with improvements in lamb/ewe ratios. It is felt by many that the sheep in the Region rise and fall on a 20 - 40 year cycle and that the increase is to be expected. Permits are reduced on the Fraser component.

There is little change to the bighorn mountain sheep situation in the Kootenays. Region 4 has both LEH and open seasons but all rams killed have to be at least full curl. There are 30 LEH permits available for ewe or lamb only in MU 4-25 at Invermere.

Region 5 also has little change to show this year with both open season and LEH opportunities. Included in this is the famous Junction Herd, which is all on LEH with odds of pulling a permit some-







where around 300 to one.

There are no overall concerns about the thinhorn sheep in Region 6. Yet anecdotal information suggests populations are struggling against forest growing into sheep habitat, particularly winter and spring range. One other concern is for bands of sheep where impact from humans is increasing as a result of increased access.

Full curl is the minimum requirement for any animal taken in Region 6 and the managers are confident that this is maintaining the stock at an adequate level.

Sheep populations in Region 7(a) are well in the north of that Region and are subject to few of the pressures of human neighbors. North of Williston Lake there is an opening for full curl thinhorn rams Aug.1 to Oct.15. And for full-curl bighorn rams in MU 7-18 Aug.15 to Sep.30

### Major portions of skull must be inspected with horns

Next door in Region 7(B) the Peace/ Liard area there is an opening for bighorn full curl rams in the most southerly MU in the Region and right on the Alberta border. That opening is from Aug.15 to Sep.30.

Then Region 7(B) has a full curl thinhorn ram opening in a number of MU's famous among sheep hunters. Such legendary drainage systems as the Turnagain, Kechika, Toad, Tuchodi, Muskwa, Prophet, Sikanni and others are all part of mountain sheep history. The open season on the big rams runs from Aug.1 to Oct.15.

Region 8 suffered a disaster in February 2000. The bighorn sheep in MU's 8-1, 8-9 suffered an extensive die-off, which decimated the population. This resulted in a complete sheep hunting closure on those MU's. The Ashnola sheep in MU 8-3 have so far been missed in the disease outbreak and all concerned are keeping their fingers crossed.

Limited Entry Hunting opportunities remain for Ashnola rams of at least three-quarter curl at various times between Sep.1 and Sep.28. In the Granby area of MU 8-15 there is an opening for any ram between Sep.1 and Sep.30.





### Goats Need Care

hroughout the province of British Columbia there is some concern for the future of mountain goats. In areas of high winter outdoor recreation there exists conflict between heli-skiing and mountain goat management. In more recent time there has been a rise in conflict between humans and mountain goats as a result of heli-hiking, and in some places heli-sightseeing.

There are also problems where increased road access has bothered the

animals and when goats are moved by disturbance to find other places they become more susceptible to predation.

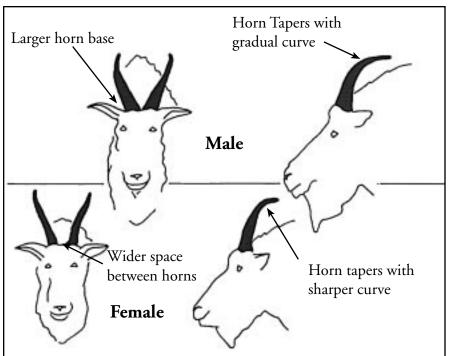
Where goats are hunted there has been concern over some hunters being unable to identify the sex of an animal and shooting nannies when they thought it was a billy.

Access to the available goat hunting in Region 1, the mainland Inlets of MU's-14, 15 is difficult so it keeps away most of the disturbing influences and Regional wildlife chief Dog Janz says the goats are healthy and the numbers increasing.

Difficult terrain, where a boat is almost an essential part of your equipment, is one of the reasons for open seasons in the more northerly MU's of Region 2. In the southern section of the Region the only mountain goat opportunity is through LEH, while two MU's in the center of the Region offer shorter open seasons.

In Region 3 there is still concern for the goat populations. If there is anything over 30% of the harvest being female then the biologists and managers get concerned because such percentages can be harmful





Some 90% of the mountain goats in Canada live in B.C. where there is concern in many areas that hunters are not sufficiently qualified to judge whether an animal is male or female before they kill it, this situation has to change.

to the population as a whole. In recent seasons the percentage has been as high as 38% female killed.

With a decline in success rate from 25% to 10% hunters are also greatly concerned for goats in the area. All hunting for goats in the Region is by permit so the Wildlife Branch has excellent records of activity and harvest. These records show that in the last five years, with an average of 500 permits per year for residents and non-residents, less than 60% of those with permits actually hunted. A number of reasons are offered but the predominant answers seem to be that prospective hunters viewed the area and on what they saw chose not to hunt. In the last two seasons permit numbers have been reduced some 40%.

Mountain goat populations have declined in Region 4 since the high numbers recorded in the 1980's. While there are good LEH opportunities wildlife managers are requesting all hunters to choose male animals in order to protect the population base.

Mountain goats in the Chilcotin-Cariboo Region 5 are also creating some concern in parts of the Region. Opportunity is still good though, both in open seasons

and through LEH. Open seasons run for two months from Sep.1 to Oct.31.

In Region 6, wildlife manager Sean Sharpe is concerned about the pressure on the areas goat population as a result of increased access. Some Skeena area goats have also seen some increased predation and all will be watched closely this season.

There are no changes in the seasons for this year and they run in some MU's from Aug.1 though Oct.15 while other MU's remain open through Nov.15.

A strong request from Region 7(A) wildlife chief Doug Heard is that all goat hunters take more time and put more effort into sexing their selected goat before shooting. Otherwise Heard things his Region's goat population is doing fine and the animals are relatively abundant. The timing of the hunt in the open MU's is from Aug.15 through Oct.15.

Similarly in Region 7(B) the season runs from Aug.15 to Oct.15 in some MU's. But if you are thinking of hunting goats in this Region be sure your proposed hunt does not fall in a MU which is open Sep.1 to Sep.30 if you wanted to hunt outside those dates.

Region 8 has LEH goat hunting only.





Medicine

for the Outdoors





rizzly bears in British Columbia are a good news bad news situation. In the southeast corner of the province the population has increased dramatically over the last 25 years. But almost kitty-corner in the northwest there are problems as a result of the collapse of many of the salmon runs.

Where bears previously topped up the needed reserves to withstand the winter on spawning, salmon biologists are watching with concern as bears search out alternative sources of fat. Wildlife section head in Region 5 John Youds is particularly concerned for the bears in MU 5-7 where the sockeye collapse to Rivers Inlet has been a particularly severe blow.

Indications in the south-center of the province, the Okanagan Valley, show a different picture. Grizzly bears are being sighted on a regular basis.

On the social, political, side of life in British Columbia bear hunters of any description are not at the top of the popularity poll. And by the nature of grizzly bears and the problems of their management extra conservative management is the order of the day. Non-resident bear hunters have a restricted number of guides offering a restricted number of hunts. But if you do your research and book well your chances of success are high.

Resident grizzly bear hunters are restricted to Limited Entry Hunting (LEH) draws only. LEH permits are available in Regions 1, 3, 4, 5, 6, and 7, only.

In Region 1 grizzlies are hunted in the two MU's, 1-14 and 1-15 situated on the mainland. These areas take in from Seymour Inlet in the north down through Kingcome Inlet, Knight Inlet to Loughborough Inlet. But they have many closed parcels as a result of industrial logging, spawning channels, and roadways.

Despite having some of the most rugged coastal mountain terrain in MU's 2-13, 2-14, and 2-15 Region 2 does not have a grizzly bear hunt at the present time.

Grizzly bear hunting in Region 3 has seen low numbers killed in the last few seasons with as low as one resident and one non-resident hunter taking a bear.

In Region 4 there are many people who believe the harvest management approach

to grizzly bears is too conservative. All people with any knowledge of the Region, particularly of the East Kootenays, know the grizzly bear population is doing well and the opportunity for hunter success is high.

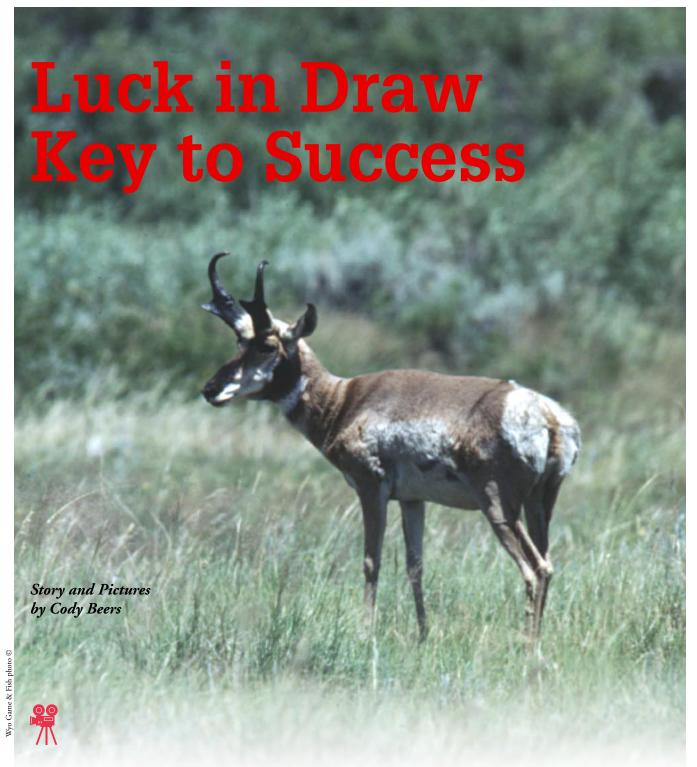
As noted, the concerns in Region 5 mean the closure of MU 5-7 to all grizzly hunting until the situation resolves. All other normal opportunities will continue.

In Region 6 wildlife chief Sean Sharpe has some concerns regarding the grizzly kill in his Region. He is not happy with the male/female ratio in the kill and he is finding difficulty in defining the management needed to move the kill as a result of human conflict over to hunting effort.

Bears continue to do well in Region 7. Wildlife chief Doug Heard feels the population continues to grow and expects it to continue to do so. But these are different grizzly bears from the coastal strains and varying management parameters have to apply.

So despite negative publicity the provincial wildlife managers are doing an excellent job of managing the wildlife populations.





he North American pronghorn and Wyoming are a perfect fit.

Commonly called the antelope, Antilocapra americana is a prairie animal. And Wyoming has vast expanses of prairie and the most antelope in the world. In fact, in some years when antelope populations are at their peak, there

are more antelope than people in the Cowboy State.

The antelope doesn't like to hide in the trees and brush like deer and elk. The prairie helps the antelope use its great speed and phenomenal eyesight to escape predators ... and hunters.

The fastest mammal on four feet in North America, the antelope is built for

speed. Its hooves have large pads that absorb the shock while it is running. Its windpipe is large and allows extra oxygen to reach its lungs while it's on the move. And its heart is bigger than the hearts of most animals of its size.

Eyesight is an asset, too, in the antelope's daily game of survival. Its eyes are located higher on the face than most ani-



mals. Eye position helps it see farther. It can spot movement up to several miles in the distance, even something as small as a paper plate.

It's these assets that present antelope hunters with the perfect Wyoming challenge, and the key to good hunting in the year 2000 is winning Wyoming's license lottery. If your luck was good and you've drawn a license, the hunting will be good.

Habitat and weather are the limiting factors in Wyoming wildlife populations. After a period of drought in the late-1980s and early-1990s, Wyoming and the western United States have experienced wetter conditions the past few years. These favorable conditions have helped big game populations, including antelope, to rebound. Wildlife managers attempt to use hunting to manage wild animals so there aren't many more animals on the ground than the habitat can support. With this in mind, the Wyoming Game and Fish Department liberalized 2000 hunting seasons. In 2000, Wyoming Game and Fish added 10,000 more special-draw licenses for antelope.

The extra licenses were added in areas where antelope numbers are showing increases-- in areas, where with the right weather conditions, population explosions could cause more damage to fragile habitat.

Wyoming is like a lot of other western states in that it has large tracts of public land. Forty-eight percent of Wyoming is public (owned by the government), and most of the public land is in the western half of America's least-populated state. In 2000, most of the antelope license increases are in western Wyoming. That's good news for hunters, because by hunting on public land, hunters can avoid paying access fees that are becoming the norm on private lands.

Two third-year Wyoming Game and Fish programs-- walk-in access and hunter management-- have been key in opening up some private land to public hunting. In return for payments and Game and Fish help, some landowners are opening their lands for hunting in the fall. These programs have enhanced some privateland antelope areas.

At this writing, there are a few left-



With any luck this little guy will live to be a productive member of the herd: Wyoming Game and Fish Photo.

over permits, but those are mostly available in eastern Wyoming. For hunters who don't mind paying a trespass fee to access private lands, this is a quality hunt. For information on availability of these licenses and the walk-in and hunter management programs, call 307-777-4600 or visit Wyoming Game and Fish's web site at http://gf.state.wy.us/HTML/hunting/huntinfo.htm.

There are several ways to hunt antelope. Nothing works every time.

One unique method involves the use of a white flag. Antelope are naturally curious, sometimes to a fault. In this instance, the antelope's eyesight is a weakness. Waving in the breeze, a flag can grab the attention of an antelope. Some people say that antelope will walk right up to a waving white flag.

Another way to hunt antelope is to stalk them. It's difficult to stalk an animal with incredible eyesight, but it can be done. A good way to stalk antelope is to hunt them in Wyoming's hilly country. There, it's easier to edge closer to the animal without being seen. Other people enjoy crawling through sagebrush, but sometimes cactus can lead to displeasure. Whatever stalking method is your favor-

ite, it doesn't really matter. They key is approaching the antelope and remaining undetected.

A third approach is to find an antelope herd, figure out the general direction they are moving in, move undetected ahead of the herd, hide and wait for the antelope to come to you. Some people use blinds, either homemade or bought from a store, to conceal their location. Other people hide behind a clump of sagebrush or in tall grass.

Remember: If an antelope sees you, your chances of harvesting it are low.

While this fall looks good for antelope, drought has once again sprung its ugly head in 2000. Wyoming's climate is arid. Ten to thirteen inches of annual precipitation are the norm. When Wyomingites talk about drought-- often extended periods-- things can be somewhat bleak. This is the case in 2000. Beginning last fall, it was mostly dry. Then, there was a mild winter and a dry spring in 1999-2000. As fall approaches, many natural reservoirs are dry, and some areas of the state remain as brown as they were in the height of winter.

These dry conditions were probably detrimental to the 2000 antelope fawn crop. If antelope does weren't able to produce enough milk for their young, it's a good bet the fawns perished. This won't affect antelope hunting in 2000, but it will play a role in future hunting seasons.

These drought conditions mean that antelope will be concentrated around water holes this fall, and with a lack of quality forage, horn growth could be stunted. On the plus side, antelope hunting will probably be easier as larger numbers will be easier to locate than normal.

Some Wyoming areas were beginning to receive some welcome rains as summer progressed in 2000. Others weren't. Maybe the biggest positive to report is that Wyoming's antelope entered the summer in excellent shape following a mild winter.

The antelope is an incredible animal, and there are more antelope in Wyoming than anywhere in North America. That's why hunting antelope is a natural fit for thousands of Wyoming residents and nonresidents every year. It may be





### Mixed Forecast for Upland Birds

Photography by Neal Mishler

pland bird hunting in British Columbia requires a specialist hunter, if one was to be successful in most recent years. Such conditions still apply. There is a lot of anecdotal information that declares all of the country covered to the comment, "we never saw a grouse."

Then again you talk to the dedicated grouse hunter who has filled the bag limit on at least one day of the season - for the last untold number of years. As with many other forms of hunting, research and reconnaissance pays off, and often saves the day.

In Region 1, Vancouver Island, blue and ruffed grouse are open region-wide for an archery season from Aug.29 to





On Page 27 the scene is of an inquiring blue grouse ready to take flight, to the left on this page is a bobwhite quail, while below is a ruffed grouse in typical habitat.



### Dry Spring Bodes Well in Alberta

The Alberta upland bird forecast looks like a mixed bag. The wild-life staff report limited spring drumming activity, suggesting the ruffed grouse numbers will remain low.

Up in the Peace River Country it appears the sharptails are down, however in the southern part of the province the numbers appear to have remained constant. The spring has been very dry in the south, this should result in a decent hatching success. The consensus is the sharptail hunting will be pretty good.

The wildlife staff I've spoken with regarding pheasant counts suggest the pheasants wintered pretty well and hunting will be worthwhile. Again the dry spring should result in good hatches.

from Wayne Norstrom

Sep.4 Then for everyone else from Sep.5 to Dec.31

Ptarmigan are only available in the mainland MU's of Region 1. Those MU's, 1-14 and 1-15, are open Sep.10 to Nov.30.

Pheasant are open on the southern end of the Island from Oct.1 to Nov.15 California quail are also open in southern MU's from Oct.1 to Nov.15. There is no opening for mountain quail. But all upland bird hunting on the Island is spotty for many reasons and needs thought and planning. Regional wildlife chief Dog Janz is optimistic about the future for blues as the large areas of second growth forest reach a suitable habitat level.

An excessive number of humans trying to live in Region 2 cause problems for many other species. Not least is the harm done to upland birds by feral cats, loose domestic dogs and excessive human transportation. The pheasant situation in the Fraser Valley is so bad the only harvestable birds are escapees from private preserves. Despite the problems MU's 2-4 and 2-8 are open from Oct.10 to Nov.15 for cocks only.

Blue, spruce, and ruffed grouse are open Sep.10 to Dec.15. Also from Sep.1 to Sep.9 for bow hunters only and those

same dates are open for the archers to try for ptarmigan where open. Ptarmigan are open for the gunners on the same dates as the grouse.

Overall in Region 3 bird hunters are looking forward to another good year. High elevation (above 3,500 feet) nesting may have been affected by a May snowfall that lasted on the ground for three or four days. This snowfall may have resulted in poor incubation. Good numbers of sharptails early in the spring suggest their numbers should be up again this year.

Sharptails will be open in MU 3-31 Sep.10 to Nov.30. Blue, spruce, and ruffed grouse will be open in many MU's Sep.10 to Nov.30 but watch 3-46, it does not open until Sep.20. Ptarmigan are also open Sep.1 to Nov.30.

Pheasant hunting, cocks only, is open Oct.1 to Nov.15. If pheasant hunting remember you must hunt between the hours of 0800 and 1600. Partridge seasons are open in some MU's from Oct.1 to Nov.30.

Bob Forbes the wildlife section head in Region 4 is "not terribly excited" by upland bird prospects in his Region this season. He said the poor spring resulted in spotty nest success. Blue, spruce and ruffed grouse in Region 4 will be open Sep. to Nov.30 in those MU's so designated as will ptarmigan. Pheasant are open in MU's 4-6 and 4-7 only from Oct.15 to Nov.15 for cocks only.

Sharptails have declined in Region 5 as a result of the poor spring last year according to the regional wildlife chief John Youds. But all grouse are open Sep.10 through Nov.30 Ptarmigan are open Sep.1 to Nov.1 Check your proposed MU for openings and keep a close watch on the bag limits.

Chukar partridge are open in MU 5-3 only from Sep.10 to Nov.30.

### Habitat degradation biggest threat to upland birds throughout the West

A cold wet spring in Region 6 does not bode well for nesting success. Sean Sharpe suggests things might be better in the northern parts, around Atlin for example, where the rain shadow effect might have given some protection.

In Region 6 grouse are open from Sep.10 to Nov.15 but check the MU carefully to ensure it is open, especially for sharptails. Ptarmigan are open from Aug.15 to Feb. 28/01.

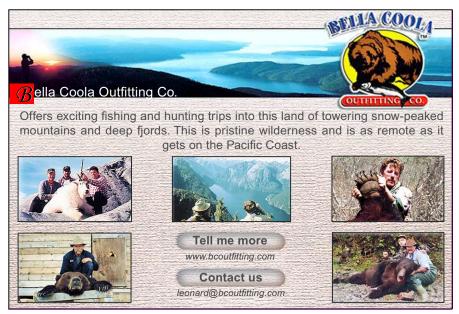
In the open MU's of Region 7(A) blue, spruce and ruffed grouse are available Sep. to Nov.15 Ptarmigan are open Aug.15 to Feb.28/01

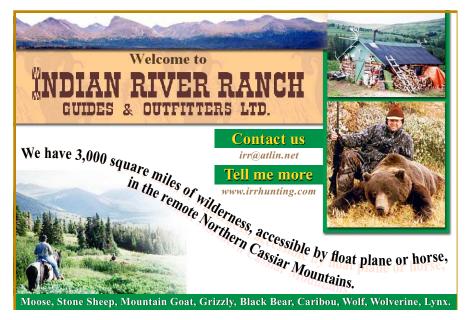
On the other side Region 7(B) has a differing regime. While all grouse, blue, spruce, ruffed, and sharptail are open from Sep.1 to Nov.15 open MU's and bag limits have to be watched closely.

Birds do well in Region 8, subject of course to all the usual caveats of weather and habitat. Chukar and gray (Hungarian) partridge are open Oct.1 to Nov.30 as are pheasants and quail. Hunting for any of these three species, plus quail hunting, can only be carried out between the hours of 0800 and 1600.

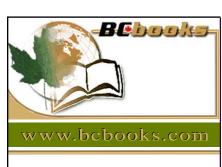
MU's for blue, spruce and ruffed grouse in Region 8 are open from Sep. 10 to Nov.30 and the regulation on bag limits should be watched carefully.

















# Black Bear Population at All-Time High

If there is one species of wildlife that does well on Vancouver Island it is black bear. There is rarely any period of hibernation on the Island, with its mainly maritime climate and year round food supply. This allows the animals to remain active and growing all year, a factor to be seen in the record books, where Region 1 animals from Vancouver Island are well represented.

There is a regular spring season of some two and a half months from mid-April to the end of June then again from mid-September to mid-December. In addition to these regular openings there is a special two-week archery only opening during the first two weeks of September.

In the Lower Mainland - Fraser Valley part of Region 2 black bears become problems because too many people are taking over their habitat. Having said that, one would think that hunters would be able to keep the situation under control, unfortunately they do not get the opportunity.

Region 2 is one home, along with the Capital Regional District in Region 1, of successful political correctness. Bear hunters just avoid the conflict with the antis resulting in more bears killed by conservation officers in Region 2 than by hunters.

In Region 3 the black bear population continues its steady increase. This year the season runs from Sep.1 to Nov.30. For the last few years the black bear harvest in Region 3 has been between 300 - 400 bears, some 250 -300 of these have been killed by residents and the rest by non-residents so the opportunity is good.

There are lots of opportunities to hunt black bear in the Kootenays. Region 4 wildlife head Bob Forbes says black bears in the Region are under-harvested and there are lots of them. There is a three month black bear opening in the spring during April, May and June. The main fall regular opening is from mid-September to the end of November. In addition there is an archery only opening in the first half of September.

For those hunting in the Cariboo-Chilcotin there is a full three-month general open season on black bears over September, October and November. Most management units also have a three-month spring season and opportunity over much of Region 5 is good.

For the last two years black bears have had life on the good side in Region 6 with short mild winters and a good food supply. Managers are concerned about conflict with humans close to civilization so there is the opportunity for a successful hunt in Region 6.

Black bears are as common and seen regularly in Region 7. Here again the population is as abundant as ever according to biologist Doug Heard with many opportunities for hunter success.

In the Okanagan human/bear conflict is one of the ongoing stories, as it is in other areas of the province, where the human population is growing rapidly. Again the opportunity is there for hunters, especially in a combined hunt situation. The black bear season in Region 8 will open Sep.1.



### MOOSE A Historical Perspective

resident of the northern reaches of the Northern Hemisphere the moose circles the earth of northern Europe, Asia, and North America. There is still a good deal of debate as to the origins

of the moose in North America. Long ago sea ice on the Bering Sea may have allowed some migration from the Far East by way of the Aleutian chain. But most sources agree that today all North American moose originate from *Alces alces*.

Occupying a broad band of what is considered 'boreal forest' of spruce, fir and pine trees; moose are to be found in Russia, Finland, Sweden, Denmark, Norway, Lithuania, Estonia, Poland, Czechoslovakia, Manchuria, and China in addition to North America.

Along with habitat in importance for moose survival is cli-

mate. Moose in winter coats show stress at temperatures above 23°F (5.1°C). In summer coats they show signs of stress at 59°F (14°C), one of the reasons they spend so much time in water during the summer months.

One unfortunate use of words has created misunderstandings which still occur today between Europe and North America. The word *Alces* means elk. So, in Europe, the moose is known as the elk. Then what north Americans know of as elk are considered to be wapiti by

Europeans, or to some, red deer.

In North America we currently acknowledge some four sub-species, they are:

A.a. shirasi - Shira's or Yellowstone moose which have been found from

From north Michigan and Minnesota and western Ontario it spreads west to central B.C. and north to the eastern Yukon Territory and Mackenzie River delta and North West Territories.

A.a. gigas - is the most northerly

moose in the west inhabiting Alaska, Yukon Territory, northern B.C. north of 60° Latitude.

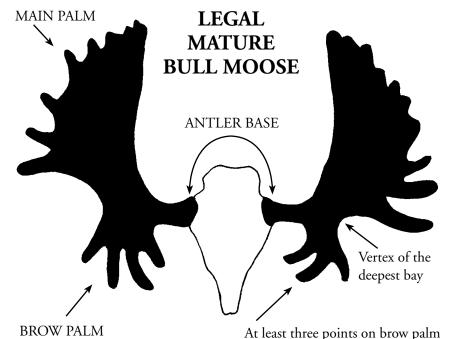
All subspecies have their own variations of color from black through various shades of brown. Often, color is dictated by a combination of age, social rank, and sex.

From early records it is known that moose were well established across the northern two-thirds of Alberta, Saskatchewan and Manitoba for hundreds of years. In addi-

tion 'islands' of moose exist in places in the prairies.

Fire suppression, a major development in the last 50-years, has allowed many forage plants to grow above a height where moose can reach them. This has resulted in reduction in moose habitat in many areas.

Despite habitat problems moose have prospered over all in the 20<sup>th</sup> Century. Improvements in knowledge of moose ecology along with careful management has allowed population growth along with some transplant and other expansion.



In British Columbia the term legal mature bull means a bull moose having at least one antler with a brow palm with three or more points. The brow palm is separated from the main palm by the deepest antler bay. The deepest bay is the bay whose vertex is the shortest distance from the antler base, when measured along the surface of the antler.

Wyoming, northern Idaho, western Montana, southern Alberta and southeastern B.C., with some in northern Utah with re-introduction doing well in Colorado.

A.a. americana - the eastern or taiga moose from Maine north to Nova Scotia and west through Quebec, to central and northern Ontario. This moose was introduced to Newfoundland.

A.a. andersoni - is the sub-species where the taxonomists are still debating but the designation is currently accepted.



## One Last Call Story and pictures by Adela Batin Story Adela Batin - For Dinner!

rowing up in Alaska, my main food staple has been wild game. Instead of driving to the grocery store, I walk to my chest freezer where I find the vegetables I've put up from my garden, and my moosemeat. A moose will last a family of three at least two years. A full-grown bull moose weighs around 1200 pounds, and boned out will yield 500 pounds of meat. When I see my freezer supply getting low, I know it's time to plan another hunt.

Friend Alan Jubenville, a professor at the University of Alaska, Fairbanks, was excited about a hunting area south of Fairbanks. He had recently floated the Dennison Fork of the Forty Mile River and insisted that there were some large moose in the area.

Showing me pictures of the float, he asked if I wanted to go on the hunt. I'd done lots of fly in hunts - this would be my first float hunt. Floating and scouting the area beforehand is a wise thing to do: Alan had done the 'legwork'.

Our most important piece of equipment was our inflatable 15-foot canoe. With a payload of 1000 pounds, it had the capacity of handling two persons, gear, 500 pounds of moosemeat and a rack. We would start 56 miles up the Taylor Highway on the West Fork of the Dennison Fork of the Forty Mile River. Then we'd float down below Chicken, Alaska and take out on the lower part of the Taylor Highway. The Taylor Highway begins at Tetlin Junction about 220 miles down the Alaska Highway from Fairbanks, and 12 miles east of Tok.

Driving in two vehicles, we left Fairbanks at 7 am on Wednesday September 10. I was excited about exploring a new area but frustrated that we had a limited amount of time, since we both needed to be back to Fairbanks by Sunday evening. After eight hours of driving we arrived at the put in site, dropped off our gear and drove to the drop off spot for our other vehicle. By the time we got back to our put in





Author Batin (page 32) with her bragging size bull moose in the Alaska country she calls home and hunts at every opportunity. Hunting partner, Alan Jubenville, checks canoe loading (above) and Batin (page 34) is ready for home and the final chore of packaging and quick-freezing the results for the freezer.

spot, around 6 p.m., it was starting to get dusky.

I love the smell of fall in the air, the pungent aroma of cranberries. With all the pre-hunt preparation this is the moment I look forward to: breaking away from civilisation and becoming one with the wilderness. The moment we pushed our canoe from shore I felt as though a weight had been lifted from my shoulders. An intense feeling of peace came over my body.

Gliding silently through the water the only sound I could hear was the water

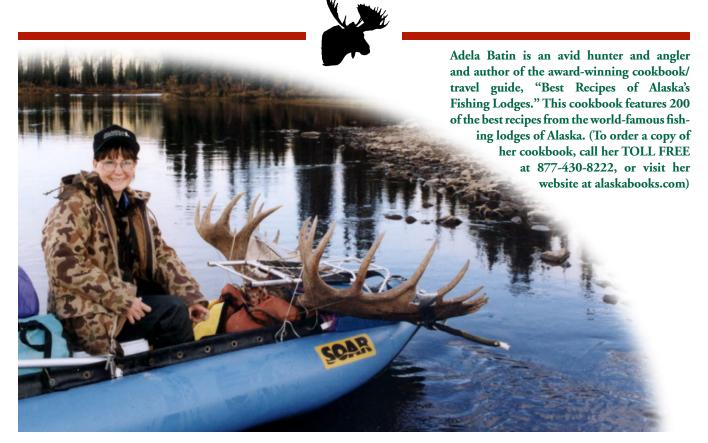
rushing over the rocks and the evening call of the warbler.

As dusk turned to darkness we scouted the riverbank for a place to pitch our tent. The bank was thick with willow, but we found a spot near a small convergence of another stream. By the time we got our tent up, raindrops began pounding the fly. It rained all night.

It reminded me of past moose hunts and the questions non-hunters would always ask: "Why would a moose hunter go out day after day in rainy weather, fight the bugs and bogs, when the reward is packing load after load of meat?" The answer is easy. My mouth watered as I thought of those juicy moose steaks, tender moose roasts and stew that would feed my family and I this winter.

For two days we floated the river and only saw one cow moose on a distant ridge. It was late afternoon on the third day of our hunt when we rounded a bend and spotted a meadow. It was 3 p.m. By the time we got our camp set up it was 5 p.m.

This was my last opportunity to hunt. Our only chance would be to try to call in a moose. Alan, with a high-pitched whine,



gave out a cow call from the meadow. We waited. Nothing. We called again and waited. Silence.

After glassing the hillside, we decided to walk inland and get higher up on a ridge. After an hour of walking through swamp, alder thickets, dense willows and birch forests, we found a sunny spot on a hillside with a beautiful wide meadow at our feet. One last time, Alan pulled out his moose call and began to grunt and bellow. My heart jumped as I heard a faint reply in the distance. Alan called again and I held my breath as I waited for the reply.

Up on the opposite ridge, 300 yards away, a cow answered. A moment later the huge rack of her bull appeared, backlit by the evening sun.

"Alan!" I exclaimed. "Look!"

"Adela, that rack is huge, shoot him!

My heart was pounding! I was trembling, trying to decide what position to shoot from. The hillside was too steep for me to lie prone, and I couldn't get a steady shot sitting on my haunches. So I quickly stepped to the side and propped my 7mm Remington magnum on a low branch of a nearby birch tree.

By this time, the moose had turned his head and was broadside to me. Both animals had seen us. They were alarmed and beginning to move quickly. I only had a split second to shoot. If I waited any



longer, the thick alder bushes on the ridge would conceal the huge animal. I took aim and placed my shot behind his front shoulder. In the next split second I placed another shot in the same spot. The huge bull stumbled and fell.

"Congratulations!" Alan exclaimed. I shook my head in disbelief. It all happened so quickly. "Way to go! That was a long shot! Let's go take a look at him."

We hiked down the hillside, across the meadow and up the ridge to the spot where the moose lay. With his huge 62-inch rack, this bull was a majestic animal!

But once the moose is down, the work begins. It was 7 p.m. and darkness would be upon us in a matter of hours. We had left our saw and headlamps in camp. I climbed a small tree and used my blue

polarfleece hunting shirt as a flag for Alan's return. He took off towards camp for the rest of our equipment and promised to be back in an hour.

After Alan left it was just me and my moose. I gave a prayer of thanksgiving for his life: The life that would nourish my family and me. I feel a real connection with animals that I've hunted. And a deep respect and reverence for the lives they've given. As part of the old German tradition, I picked a willow branch and placed it in the moose's mouth as a sign of his last meal.

It took twelve hours to cut up the moose and pack it the mile back to camp through the dense thickets and swamp. Once there, we hung up the meat in the trees, until our morning departure down the river.

After only a four hour float to our take out point, I realised how close I'd come to not filling my freezer this winter. We'd come very close to not making that last call!

A seven-hour drive and we were back in Fairbanks; I arrived home jubilant on Sunday evening. The next morning, as I was thinking about preparing a moose dinner with fresh vegetables from the garden, I looked outside and saw three moose in my garden, cleaning up the snow peas. They were making their last call for dinner!





### Moose Management Rebuilding Stocks

espite the moose harvest dropping by 50% from the mid-1960's to the mid-1990's there is a mood of cautious optimism throughout those folks in the British Columbia wildlife branch involved in ungulate management. Various conservative measures have been applied over the last few years and those efforts are showing.

Regions 1 and 2 have no moose hunting but in the rest of the province Limited Entry Hunting permits have governed much of resident moose hunting for a decade. There is some sort of season in Regions 3, 5, 6, and 7, with Region 4 being on LEH only. In addition there are a variety of LEH permits for residents in Regions, 3, 5, 6, 7, and 8.

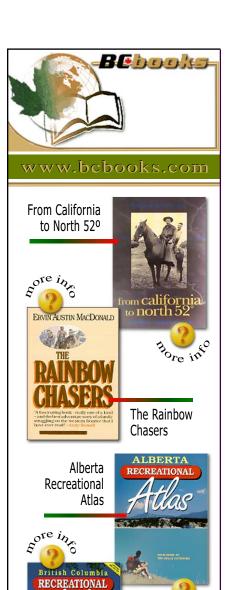
Despite there being no moose hunting in Region 2 the wildlife section chief for the Region is optimistic about the future. "Moose numbers in the Region are steadily growing, despite predation, and the future for moose in the area looks stable at the least."

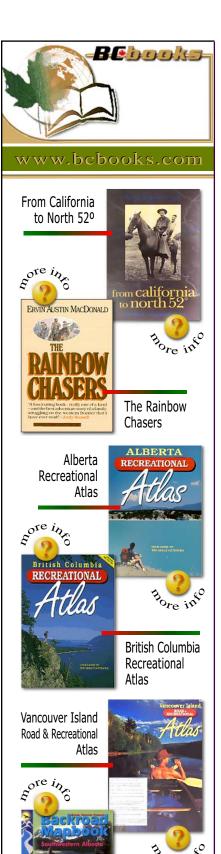
Various restrictions on antler size are in force in different parts of the province and

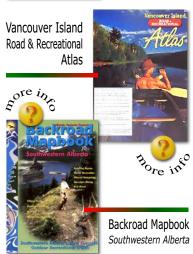
it is important that the potential hunter is clear on what is legal. Considerable disagreement has occurred as to definitions and it behooves the hunter to be clear on the Wildlife Branch definition.

Wildlife biologist in Region 3, Doug Jury, is positive about moose in the Region despite the common problems of the last few years. "Bull harvest was up significantly last year, approaching the numbers we had prior to the start of LEH some eight years ago," he enthused.

Opportunity this fall should be good with an open season on immature bulls









running for a month in many MU's. Opportunity for many of those lucky enough to draw a LEH permit for a bull in Region 3 is excellent.

In Region 4 all moose are on LEH only and the only huntable animals are mainly bulls for a short period at the end of Oct. and early Nov. Predation has been heavy in a number of MU's in the region. Grizzly taking calves, and wolves taking all they can get, is a cause for concern to all moose management staff and others.

### Compulsory reporting of all moose killed in Regions 3, 4, 5, 6.

Regional wildlife head in Region 5, John Youds, is concerned over what he calls "the significant loss" of moose due to tick infestation the previous year. Carry over calf ratios appear to be depressed throughout the Region despite the high predator numbers, particularly wolves. All moose in the Cariboo are on LEH only.

Despite the problems there will be a two-week season on bulls in Region 5 in some MU's, again be sure the area you are intending to hunt is open at that time.

Mixed messages are coming out of Region 6 on the moose situation there. Regional wildlife section head Sean Sharpe says the good winter allowed for a better than average carry-over in much of the Region. With the warmer winter and lower snow accumulation road-kill numbers were way down.

Having said that, Sharpe points out that the Region is doing a major Region wide moose survey this year, the last major survey was five years ago. While northern populations are healthy the Bulkley area and the Nass valley are major targets for population census this year.

There are two bow only seasons in Region 6, one in early September and the other in mid-November for bull moose in many MU's. Open season on bull moose from Aug.15 to Nov.15 is available in MU's 6-17, and 6-18 to 6-29. Various other seasons occur for bulls between Sep.10 and Nov.15.

Region 7(A) the Omineca area has an archery only season on immature bulls from Sep.1 to Sep.9. Then various

### **Moose and Farming** in Alberta

by Wayne Norstrom

lberta moose are a good news, bad news, good news story. The good news is that moose have extended their range out into the prairie parkland. This is all private or leased land. The moose are increasing rapidly as large predators in this heavy agriculture are non-existent. In some wildlife management units there are both moose and antelope permits available. Bizarre.

The bad news is the northern moose, especially in the northwest, have suffered losses of between 10 and 30 percent. These losses result from a series of events but are predominantly tick caused. The reduction of moose results in a decrease in permits.

The good news is that Alberta still produces its share of record book heads. Although moose are generally hunted for meat, there are still some excellent trophies taken every year. All parts of the province produce good heads.

It appears that a proposal that will allow two hunters to share one moose tag will be in place for 2000. As far as I can determine this is for resident hunters only.

The season dates have remained more or less consistent with the northern season running from early September to the end of November.

openings for calves and immature bulls which vary by MU between Aug. 15 and Nov.20.

In the other half, Region 7(B), the Peace/Liard area, the archery season for bulls runs Oct.1 to Oct15. Various MU's are open on varying dates for bulls between Aug.15 and Oct.31

A number of MU's in Region 8 are open for immature bulls for a month between Sep.20 and Oct.31.



Game to Cook



### Chulitna Moosemeat Stew

by Adela Batin

	• 1	•	4 · 1	•
6	strips bacon,	Cut into	L-inch	nieces
U	strips bacon,	cut mito	1 - IIICII	picces

- 2-3 pounds moosemeat or lean beef, cut in 2-inch cubes salt and pepper
- small onions, peeled
- 2 medium potatoes, well-scrubbed and cubed
- 3 tablespoons all-purpose flour
- 1 1/2 cups dry red wine
- 1 cup beef broth
- 3 tablespoons brandy
- 2 cloves of garlic, pressed
- 1-2 strips of orange peel (make sure you wash the orange well to remove any chemical residue)
- 1 teaspoon marjoram
- teaspoon fresh thyme (1/2 teaspoon if dried)
- 1 medium-size onion, studded with 3 cloves
- 1 pound medium-size mushrooms
- 4 large carrots, peeled and cut 1/2-inch thick

In a large frying pan on medium heat, cook bacon until brown and crumbly.

With a slotted spoon, remove bacon from pan and place in a deep casserole dish. Reserve pan and bacon drippings.

Sprinkle meat with salt and pepper. Add meat cubes to the pan, a few pieces at a time, and cook over medium heat until brown on all sides. Remove meat cubes from pan and add to casserole. To the remaining pan juices, add white onions. (The easiest way to peel small onions is to drop them whole into boiling water for a few minutes, remove and peel). Cook onions until light brown. Set aside.

Add flour to the remaining pan juices. Cook until bubbly, stirring frequently. Pour wine and brandy, stirring until sauce is thick. Add garlic, orange peel, marjoram and thyme. Pour sauce over meat in casserole. Tuck clove studded onion down in liquid.

Bake in 325 degree oven for 2 1/2 hours. During the last half-hour of cooking, add mushrooms and carrots, cooking until tender. Remove the studded onion.

Serves 6



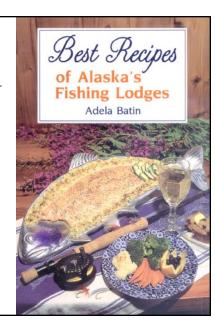
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### Winter tick infestation can drop a moose

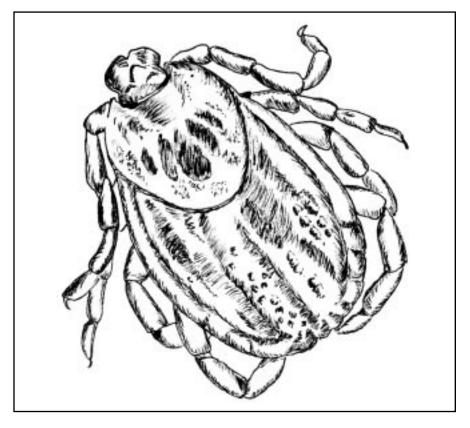
by Hamish Farquharson

redators are not all huge, hulking, brutes, full of testosterone and aggression. Some of the worst are insignificant looking little creatures slinking about waiting an opportunity to take their prey unawares. Among the later is Dermacentor albipictus, a horrible little object related to spiders and scorpions but found over much of North America.

Some people call D. albipictus the winter tick because it does its worst damage over the winter months. Others call it the moose tick because moose are its favorite food although it can be found on other members of the deer family. Yet to other people it may be the shingle tick. On occasion it is found on livestock, and rarely found on humans. But by whatever name you know it, its bloodthirsty lifestyle is a cause of irritation, pain, suffering and death.

In the winter/spring of 1998/99 wild-life watchers in moose habitat were reporting the heavy tick burden being carried by the moose population and the damage it was doing. British Columbia provincial wildlife veterinarian, Dr. H.M. Schwantje, told Western Hunting there was a significant number of moose affected by ticks right across Canada from Manitoba to B.C. "It was a bad year, primarily due to the mild winter the previous year and the good tick survival, plus the good moose calf survival," Schwantje said.

In the west we have three common ticks with the western black-legged tick (Ixodes pacificus) being confined to coastal regions. The other two, D. albipictus and D. andersoni, the Rocky Mountain wood tick, tend to have a broad range of country that they cover.



In general, ticks are destructive, bloodsucking, parasites found in practically every country in the world. While ticks are a pest everywhere their greatest economic impact is to be felt in the tropical and sub-tropical regions of the world.

When a tick bites its chosen host the bite usually causes local irritation. The wounds caused by the bites are susceptible to all forms of complications. On many occasions bacterial infection or screwworm infestations are common.

Ticks are capable of transmitting serious diseases due to bacteria, protozoa, viruses and rickettsiae. Some tick species are not only vectors but are also reservoirs of disease in different parts of the world. Of these later the most important include Rocky Mountain spotted fever, tularemia, relapsing fever, Q fever, babesiosis, anaplasmosis, theileriasis, and heartwater.

Taxonomically ticks are separated into two families. There are the soft ticks or Argasidae and the Ixodidae, or hard ticks, that are the scourge of domestic livestock. Argasidae feed frequently and for short periods of time. They lay small batches of eggs after each meal of blood and may live for several years. Ixodidae females take one large blood meal lay one large batch of eggs and then die. Ixodidae males



may feed more than once and take a little blood at a time.

Under normal circumstances the whole life cycle of most ticks is completed in one year. But some ticks may complete only one stage of its life cycle in a year.

There are three parasitic stages in both tick families. These are the larva stage, the nymph and finally the adult. The larva has three pairs of legs compared to four pairs in the other stages. In the larva stage the tick may spend the largest portion of its life away from a host.

Eventually the tick larva attaches itself to a suitable host. Once attached, it feeds from three to seven days until it is completely engorged. At this point the life cycle differs according to species. The species divide into three groups: One-host ticks; Two-host ticks; and Three-host ticks.

In one-host species, such as D. albipictus, the tick sticks with the one host throughout its parasitic life. It molts through to nymph and adult and leaves the host only when ready to lay eggs.

With some species of two-host ticks the larva and nymph complete these two phases of the ticks life cycle on the one host. The adult developing from the nymph does so on another host.

When it comes to the three-host species we see the engorged larva drop to the ground from the first host. It then molts through to the nymph stage on the ground. Then the nymph finds another host, not necessarily the same species as the first host. It then gorges itself again, drops to the ground again, and molts to an adult. Finding a third host it gorges itself again then drops to the ground to lay its eggs. The American dog tick (Dermacentor variabilis) is a good example of this large group.

As the three stages of the female, larva, nymph, and adult feed they greatly increase in size. A fully mature adult female ready to drop and lay her eggs may be as much as 300 times the body weight of an unengorged female. The male shows only a small increase in size and weight.

When the fertilized female tick falls to the ground she crawls away from the light among the grass and other surface plants. She may start to lay her eggs right away or egg laying may not start for two or three days. During the summer egg laying can be complete in a week to ten days. In cooler climates egg laying may be delayed and extended considerably.

Laying one batch of eggs, as many as 2,000, then the female dies. The eggs are resistant to difficult conditions so long as the humidity is adequate. The eggs do require both warmth and humid conditions to hatch. In the laboratory eggs hatch between 14 – 16 days at around 28C (80F) and a relative humidity greater than 80%.

On hatching the larva climb to the tip of the available vegetation to await a passing animal. The most important factor in survival of the non-parasitic larva at this stage is high humidity. The next significant item for the larva is hooking on to a suitable host. Without a source of blood most larva can survive for 90 days, some may survive on pasture for 180 days depending on conditions.

During each life stage of a three-host tick the tick can survive for a long period of time without a host. Unfed nymphs and adults can become dormant and prolong the cycle for up to three years.

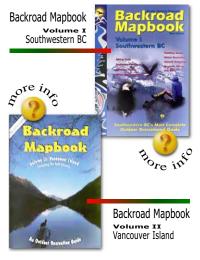
Heavy tick loads can be extremely debilitating. This is what so many of the moose population suffer from in a bad tick year. A single moose may be infested with tens of thousands of ticks. Each tick may well remove a significant quantity of blood at each feeding. This feeding causes irritation at the bite site. The moose rubs and scratches often removing large quantities of hair by early spring.

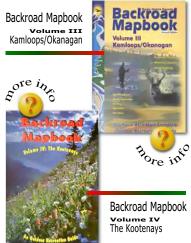
These huge numbers of ticks can weaken animals by direct blood loss, poor body condition as a result of time spent scratching instead of feeding, loss of body heat. Such weakened moose are then vulnerable to bad weather occurring before new hair grows. Death of young affected animals in the spring is common when poor nutrition and weather conditions are added to the equation "The good news is that in areas of heavy snowfall that heavy snow load will likely reduce tick numbers for next year," Dr Schwantje said

And so it proved. Moose tick burden declined last year after creating wildly varying mortality across the west. While the mortality was predominately among the young, all ages suffered. So moose populations get the opportunity to regain their losses - until next time.



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### Better Equipment



### A Cure for Stinky Feet by Hector Finlay

Wildlife knows the smell of humans can mean danger. Because of this lots of people have worked hard at removing the smell of the human animal from hunters in the field. One of the last bastions of spreading human body odor on the hunting trail was hunters' feet. So it was only a matter of time before some innovator came up with a way of hunters keeping that secret to themselves.

At the 22<sup>nd</sup> annual SHOT show held in Las Vegas earlier this year W.L. Gore and Associates in partnership with Browning and Rocky Shoes and Boots Inc. announced their breakthrough in the control of foot odor in the hunting field. The Gore company is best known to outdoorspeople as the developers of Gore-Tex® which revolutionized the manufacture of waterproof clothing.

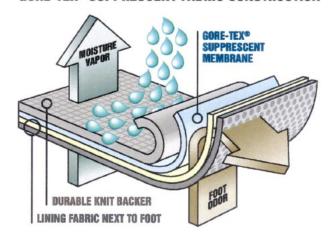
To all big-game animals, humans stink. Gore tackled part of the problem with their Windstopper® Supprescent™ fabric that absorbs human scent to help block their smell from the extremely sensitive noses of their potential quarry. This left those stinky feet, and the only answer was rubber boots. Unfortunately rubber boots also keep in all the moisture created by an active day in the field and this leads to clammy, cold, uncomfortable, feet, with the potential to ruin an otherwise good day outdoors.

Today there is another choice, hunting boots by Browning and Rocky featuring the latest from Gore. These boots incorporate the Gore-Tex® Supprescent<sup>TM</sup> fabric specially engineered to reduce the transmission of human scent molecules to undetectable levels.

This new fabric is claimed to restrict the human scent while continuing to provide the highly breathable, durable, waterproof protection that has made the name of Gore-Tex a household word.

Key component is the ePTFE, expanded polytetrafluorethylene, mem-

### **GORE-TEX® SUPPRESCENT FABRIC CONSTRUCTION**



brane used in Gore-Tex Supprescent fabric for footwear which selectively reduces human odor transmission through the membrane without compromising either moisture vapor transmission or durable waterproofness.

Reporters at the SHOT show were able to experiment for themselves. Gore provided a Gore-Tex pouch with an ampoule of ammonia in it, and a second pouch made from Gore-Tex Supprescent fabric, also with an ampoule of ammonia. We were invited to break both the ampoules and smell the difference. If both ampoules were the same then this reporter can attest that the new Supprescent fabric works with ammonia, and you all know how it stinks.

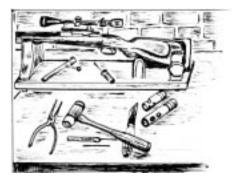
Gore maintain extensive testing facilities and laboratories for their products which are used in aerospace, medicine, automotive, pharmaceutical, computer, semiconductor, and many other applications. Gore's laboratory testing is designed to simulate actual field conditions as closely as possible. In this case, odor permeability testing was performed using molecular components found in real human scent.

Hunting boots made with the new fabric do not require any special treatment or regeneration. If the boots are allowed to air out thoroughly between uses that is enough to ensure the products continued effectiveness. One other helpful tip is that the use of commercially available shoe dryers that circulate warm air through these boots overnight will help reduce any remaining perspiration and odors.

Rocky® are producing a number of styles using the new Supprescent fabric plus they use Healthshield™ leather which is a specially treated, antibacterial leather. With their Trophy Stalker model for spring turkey and early bow season they also use 1,000 denier Cordura® upper with snake proof backer.

A knit Cordura Plus liner from Glen Raven's Knit Fabrics Group is adding strength, durability and comfort to the new range of Rocky boots introduced at the show. "A liner made of Glen Raven's knit Cordura Plus fabric adds additional performance benefits – durability, stretch, odor resistance – that hunters demand, as well as the comfort they seek," said Dennis Disser vice-president of marketing for Rocky.

So technology gives hunters one more tool to help them stalk big game successfully. There is little doubt that other boot manufacturers, in addition to Browning and Rocky, will be manufacturing boots with the Supprescent membrane in the near future.



### The Gun Room



### Sako Key Concept by Hugh Fraser

When a gun is not in the owner's hand is it safe? This is a major question for everyone connected with firearms as is clearly shown today at every event where firearms are present.

The 22<sup>nd</sup> annual SHOT show held earlier this year in Las Vegas was no exception. Manufacturers of firearms are all endeavoring to find ways to ensure owners of their firearms can make them inoperable by some simple adjustment.

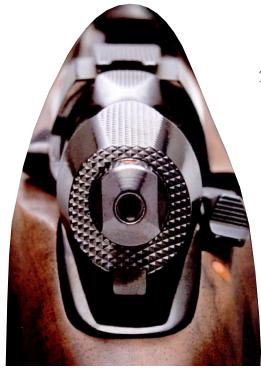
At the show the Finland based rifle manufacturer Sako Ltd. and its U.S. distributor Stoeger Industries Inc. launched their concept of making a rifle safe. Introduced at a press conference for the shooting press was the "Sako Key Concept" a built-in locking mechanism for the Sako 75 hunting rifle.

A special key, unique to each rifle, is built in to the rifle's bolt action. When the key is removed there is no way to operate the gun, even accidentally, the manufacturer claims.

"The key blends in to the rifle contours when the lock is open and the gun is operational. When the key is removed there is no way to operate the gun, even accidentally," said Paul-Erik Toivo, president of Sako. "Any attempt to pick the lock will render the rifle unusable," he said and explained that any attempt to force movement in the bolt would render the rifle unusable.

One other locking device was announced at the SHOT show by the Saf-T-Hammer Corporation. Called the Saf-T-Trigger<sup>TM</sup> it is a tiny trigger-blocking device.

Company president, Bob Scott a former top executive with Smith & Wesson, said he believed the new product was truly revolutionary. "Saf-T-Trigger meets the needs of consumers who want security but don't want to sacrifice



First ever integrated rifle lock gives owner control of security. Totally blocks the firing pin and prevents bolt movement.

Combines ingenious design, precision engineering, and traditional craftsmanship. One more step in hunter safety.



accessibility, reliability or safety," he said.

"A unique security key extends the tiny device securely behind the trigger, preventing the trigger from being moved and the gun being fired. The firearm can be quickly reactivated, using the same key, as the Saf-T-Trigger retracts into the trigger guard," he said.

"This device will fit neatly into nearly all the 230 million firearms currently in circulation, including handguns, rifles, and shotguns. A mechanically adept gun owner or a gunsmith can easily install it by drilling, tapping and threading a hole in the trigger guard. Saf-T-Trigger can be retrofitted on nearly any firearm in minutes, for about \$35(U.S.) retail, including labor," Scott explained.

One other system discussed at the Las Vegas show was that of the Australian Lock Company, of New South Wales, Australia. With the trade name of Armsafe it has been collecting awards in Australia since 1986.

One of the selling points of Armsafe is that it needs no modification of the firearm, is easy to install (manufacturer claims less than one minute) easy to remove, and offers the patented Bi-lock security. There are four components to the system: a dummy case is placed in the breach of the firearm and the action closed; a threaded rod goes down the barrel and screws clockwise into the case; the lock unit goes over the end of the barrel, you insert the key and screw the lock onto the rod; lock and remove key.

This is a flexible system which the manufacturer claims will fit the majority of firearms. The lock and keying system is one of Australia's most preferred high security locking mechanisms. In fact the Bi-lock has been endorsed by the Australian Security Intelligence Organization for achieving the highest possible security rating in Australia.

### **NEXT ISSUE:**

## A Walk on the Cold Side

Winter looms large to many hunters. We all have memories and visions of the dark, of the dark and the cold, of the dark the cold and the wet. And yet those visions and memories are some of the strongest memories we retain with pleasure despite the real or imagined discomfort.

In the next issue of *Western Hunting* we will be taking a close look at winter. We will be examining the pleasures and dangers of hunting in winter conditions. We will be looking at some of the ways to navigate safely in short days with poor visibility. We will be looking at some of the clothing specially designed for winter

conditions. We will be looking at some of the safety procedures which are a necessity when outdoors in winter conditions. Also to be looked into are the changes and precautions necessary with firearms and more particularly ammunition in cold and wet conditions.

As a second feature the winter edition of *Western Hunting* will give a close look at the cougar, *Felis concolor*, and its many sub-species in western North America. In recent years the cougar populations in many areas have grown considerably with attendant problems.

Individual animals, especially males, are

distance travelers always on the lookout for the main chance; thus these are the animals most in conflict with humans. Cougars live a solitary lifestyle as adults and on their home territory are rarely seen by people. Yet more and more we are hearing of attacks, on livestock, pets, and occasionally humans, attributed to cougars.

Predator management is still in its infancy in many jurisdictions, yet society is trying to come to grips with such management today. The next issue of *Western Hunting* will look at where cougars and their management is in the scale of things and offer some vision of their future.

