

# Nature Alberta

ALBERTA'S NATURAL HISTORY REVIEW



**BALDY MOUNTAIN (NEAR NORDEGG)** BONNIE MULLEN  
PHOTOGRAPHED ON OCTOBER 23, 2004 USING A CANON A80 DIGITAL CAMERA

*feature article*

## Winter Pronghorn

---

on their Northernmost Range

# ENJOYING, EXPLORING, & PRESERVING NATURE

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Naturalists usually start in as beginners who have their curiosity aroused about nature: some start very young; others not until late in life. Age does not matter in a naturalist; it is the spirit that counts."

From The Amateur Naturalist by Vinson Brown



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## DEADLINES FOR FAN PROJECT REPORTS ARE:

ALBERTA CHRISTMAS BIRD COUNTS. **JANUARY 30**

MAY SPECIES COUNT - BIRDS AND MAMMALS. **JULY 15**

FAN, 11759 GROAT ROAD, EDMONTON, AB T5M 3K6

MAY SPECIES COUNT - PLANTS. **JULY 15**

ELAINE GORDON, 15216-74 STREET, EDMONTON, AB T5C 0Y7

COMPILER COOPERATION IS GREATLY APPRECIATED.

The Federation of Alberta Naturalists is composed of natural history clubs from across the province. The aims of the Federation are:

- (a) To encourage among all Albertans, by all means possible, an increase in their knowledge of natural history and understanding of ecological processes;
- (b) To promote an increase in the exchange of information and views between natural history clubs and societies in Alberta;
- (c) To foster and assist in the formation of additional natural history clubs and societies in Alberta;
- (d) To promote the establishment of natural areas and nature reserves, to conserve and protect species, communities or other features of interest;
- (e) To organize, or coordinate symposia, conferences, field meetings, nature camps, research and other activities whether of a similar or dissimilar nature;
- (f) To provide the naturalists of Alberta with a forum in which questions relating to the conservation of the natural environment may be discussed, so that united positions can be developed on them, and to provide the means of translating these positions into appropriate actions.

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## P R E S I D E N T ' S   P A G E

# Toasting FAN, Alberta & Einstein

BY DENNIS BARESCO

*Gosh, so much is going on that it is hard to keep track of it all. All kinds of birthday celebrations are in progress.*

Alberta is 100 years old and many celebratory projects are underway. Saskatchewan is also a hundred; I'm sure lots is happening "over there." The really big birthday celebration in 2005 is the Federation of Alberta Naturalists: we are 35 years old! Our Annual General Meeting, set for Edmonton on April 30, is the official party. Well no, we're not celebrating with a meeting: there will be a gala! Call Coral Grove or the FAN office for details.

Thirty-five is pretty young for an organization. FAN is still maturing, still growing, still needs lots of nourishment. The organization has a well-developed brain, in the form of its Executive - and there's about to be a shot of organic brain stimulant when Sandra Foss takes over as President at the AGM. The heart - the directors - keeps pumping surely and methodically: maybe a few clogged arteries now and then, but that's normal for a group of any age. The Corporate Clubs -

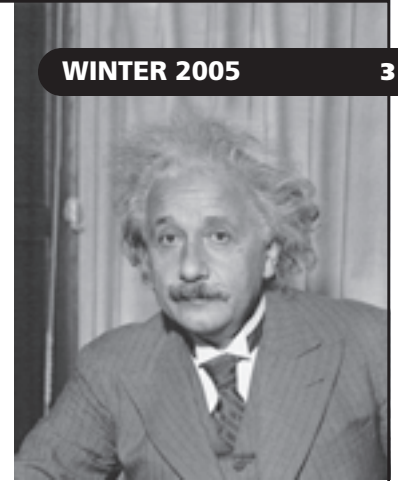
the arms and legs - keep FAN moving, keep her active, and the fingers and toes (Associate Clubs, of course) keep the balance. It is FAN's central nervous system that holds it all together. Without Executive Director Glen Semenchuk, FAN would be almost paralyzed. It's been suggested that if Glen lost that main vital nerve, Karen Rimney, he too would be incapacitated.

I think I've pretty well beaten that metaphor to death, but I did want to mention the other main nerves - the office and project staff who keep us aimed towards our objectives, and the volunteer blood that give FAN its warmth and stamina. Of course, we're always looking for new blood if you...okay, that's enough!

Another group, with which FAN is affiliated, just finished celebrating: the Canadian Nature Federation turned 65 last October and changed its name to Nature Canada. I was reading their magazine, also called

Nature Canada, just before writing this. A few of the articles were very encouraging, including Caroline Shultz's "Thinking Like An Island", about merging "ecological forethought with farm sense" on Pelee Island. "Vintage Valley", by Rick Searle, could be positive. It's about protecting habitat as a National Park in BC's South Okanagan. If all things were equal and intelligence plus the good of the whole community trumped avarice plus selfishness, then the Park is a no-brainer.

Of course, it's not all good, but regarding three of the non-encouraging articles, we'd be shocked if the view was positive: a) an Environment Minister (federal) who seems a bit confused about what department he's in; b) yet another action by Department of Fisheries & Oceans (I'm talking about the Ottawa department, not the field people) which is legendary for incompetence; and c) the never-ending saga of the [insert your



own perceptive adjective]  
Cheviot Mine.

Still, by the time you read this, it might be Spring-like, and all those people who like nature will have decided to stand up for nature. They'll have written letters, phoned politicians, volunteered their "blood", and watched proudly as they realize THEIR actions actually made a difference. I'll bet the farm on it!

Oh, there's one more birthday, maybe the biggest. It's one hundred years since Albert Einstein wrote the papers that stunned and eventually changed

the world of physics. So, in honour of Einstein, here's a question for you. There's a prize - truly, a nice prize - to whoever can answer it correctly. Here goes:

*"If you could position yourself 10 minutes beyond the edge of the expanding universe, what would happen when the universe reached you?"*

ANSWER TO DENNIS:  
grassnat@memlane.com; fax (403) 526.6408

I'll credit where I got the question when I give the answer (and announce the winner) in the next issue. Go ahead; try to answer it; you don't need to understand the answer to win. Happy birthday to all of you.

## Word Search: *Hoofed Mammals*

BY LAURIE LYWAK

Circle the words found below. Words may be horizontal, vertical or diagonal and may be spelled backwards. The remaining letters can be rearranged to answer the following clue:

*Rutting behavior.*

Antler	Fawn	Rut
Bell	Grunt	Scrape
Bison	Odocoileus	Stag
Buffalo	Oreamnos	Stott
Bugle	Pellet	Tine
Caribou	Ram	Velvet
Cervidae	Rangifer	Wapiti
Elk	Roadkill	Yearling
Ewe	Ruminant	

T	G	N	I	L	R	A	E	Y	T	B	H
O	E	B	U	F	F	A	L	O	T	U	T
D	N	L	F	N	O	S	I	B	O	G	U
O	B	E	L	L	L	E	N	I	T	L	R
C	E	G	N	E	L	K	L	N	S	E	R
O	P	R	W	W	P	L	A	M	U	I	E
I	A	U	A	E	I	N	T	O	R	T	F
L	R	N	F	K	I	E	B	G	E	I	I
E	C	T	D	M	V	I	E	A	L	P	G
U	S	A	U	L	R	A	M	T	T	A	N
S	O	R	E	A	M	N	O	S	N	W	A
R	E	V	C	E	R	V	I	D	A	E	R

SOLUTION FOUND ON PAGE 18

## EDITOR'S PAGE

“He who appreciates is richer beyond words than he who possesses.”

ANONYMOUS

# Two Birds

BY BRIAN PARKER


*The official ABRC list of Alberta birds now exceeds 400 species (coming in the Spring Issue), or several-fold more than this Editor can routinely identify without taking along a guidebook when walking in the woods. I'm not much of a birder (I have more interest in fish and herptiles) but birds do figure in several long-standing memories.*

Just after completing my B.Sc. I spent a fair bit of time working in northern Manitoba. One summer I was stationed in a one-tent camp near a remote walleye-spawning stream on Southern Indian Lake (about half-way between Thompson and Churchill). The campsite was less than perfect, being situated in a mosquito-infested sphagnum bog. On one particularly bad day we decided to stay put in the tent all day rather than venture out into the fog and rain. After hours of sitting next to the wood stove trying to stay warm, I put on rain gear and stepped outside the tent, intending to get out for a few minutes even if the weather was miserable. To my surprise, a male Yellow-rumped Warbler landed on the branch of a nearby stunted spruce tree about 2 m away and started to sing. It was a little blaze of colour and song in an otherwise quiet and sombre landscape. The contrast

was so striking I have remembered that otherwise insignificant incident ever since.

Another more recent memory involves Golden Eagles. I worked out of a field camp near the Scotch Camp warden cabin (in Banff park) for ten years beginning in 1991. My work would see me, and a small crew of summer assistants and graduate students, hike from the cabin into several alpine tarns in the vicinity of Snow Pass three or four times a week. Pipit Lake was a frequent destination. The trip into the lake, about two hours from and 400-500 m above the cabin is spectacular. The last 3 km traverse a 45° slope along narrow elk trails through a patchwork of krummholz, scree slopes, snow chutes and fragments of alpine meadow. It was common to observe elk, bighorn sheep and grizzly bears. One summer we saw a female grizzly and her cubs on at least a dozen occasions.

On one early morning trip into Pipit Lake we saw a Golden Eagle top the ridgeline above the lake and careen down the 500 m high cliff-face behind the lake, wings half-folded and seemingly falling through the air just a few metres from the rock face. The bird was traveling at tremendous speed when it reached the top of the slope we were walking on. It turned towards us, continuing to move downslope, and passed by just below us and probably less than 10 m away. I recall the eagle cocking its head slightly to look up at us as it passed. It continued on downslope for as far as our eyes could follow, possibly heading for the meadows on the west-facing slopes of the Bare Range, where we often watched Golden Eagles hunting. A real hunter the Golden Eagle, quite unlike the Bald Eagles we used to see at nearby Harrison Lake, which seemed to spend endless hours



sitting in the krummholz along the lake shore, patiently waiting for a fish to die and its rotting carcass to float to the surface.

Given the vividness of these memories, it's easy to understand

why birds are so often the impetus that awakens an interest in natural history in us. We see mastery of the air at a level we cannot achieve, despite our technological

prowess. And we marvel at the fortitude of the small and seemingly insignificant "dicky-birds", which always appear to be on the verge of being swallowed up by the landscape.

## LETTERS TO THE EDITOR

### Dear Editor;

The article by Glen Semenchuk (Fall 2004) about the Woodland Caribou Recovery Plan, reported a lack of meaningful action to save the mountain herds. I see a strong parallel to the current outcry to stop the grizzly hunt because about 30 years ago hunters and environmentalists were calling for a moratorium on shooting caribou along the foothills. Hunting closures didn't make much difference so the government continued to develop (and reject) new scientific recovery plans while approving more habitat destruction and ignoring accumulated impacts.

In the book "Waterfowl Tomorrow" (1964), John Madson and C.H.D. Clarke stated:

*"The consummate offence to wildlife is not hunting, but the extirpation of species by an indifferent technology in which wildlife is wiped out — not by man's passion — but by his single minded devotion to a material world in which wild creatures have no place. It might be nobler for man to deliberately hunt down the last wild creature in one final declaration of value than to sweep it away forever as an unknown and unmourned technological casualty."*

Perhaps environmentalists should request one last open hunting season so the few remaining caribou and grizzlies can go out with a bang, rather than a whimper. Albertans should also recognize that grizzlies and caribou are just the short list of species at risk. If profits are the real Alberta priority, it would be more cost effective to predict the species that will survive the next thirty years - on a tree farm in the oil patch.

CARL HUNT

### Dear Editor;

Good-looking makeover! I've been passing the magazine around, asking for comments.

The local ducks think it's great, although the slick cover is a little hard to hold in webbed feet. The elk figure the larger

article heads are easier to read standing up. Deer mice were sort of noncommittal, although one told me that she tried it for nesting material and was happy to learn that the paper is still of excellent quality.

Only negative comment came from a wolverine up the way, who said it was boring. But I know for a fact that the bugger can barely read.

BEN GADD

## ALBERTA ISSUES

## Off Highway Vehicles

In Nova Scotia, a committee of citizens from the natural history and off highway vehicle (OHV) community has come up with 39 recommendations for MLA's regarding OHV Issues, including safety, protection of the environment, and trails. This is an excellent document, and

Alberta MLA's would be wise to adopt similar measures. The government website, which has the executive summary, the 39 recommendations and the text of the final report in PDF format is: <http://www.gov.ns.ca/vp/ohv/finalreport.htm>

## Laurentians Residents Win Snowmobile Battle

Residents in St-Jovite, in the Laurentians north of Montreal, have won a 6-year fight to ban snowmobiles in a local park. A Quebec Superior Court judge has ruled snowmobiles are a source of noise pollution and people who live within 100 m of the "Petit Train du Nord" Linear Park are entitled to \$2,400 a year, retroactive to

1997. About 600 people will benefit from the ruling. The provincial government and the local municipal authority will share the costs. In an 80-page decision, Langlois also ruled snowmobiles can be prohibited over a 40-kilometre stretch in the Laurentians between the towns of St. Faustin-Lac Carré and Labelle.

## FAN, AOHVA and CCSA

FAN, the Alberta Off Highway Vehicle Association (AOHVA) and the Canadian Coalition for Access and Stewardship (CCAS) are planning a workshop/think tank in April 2005. The purpose is to convince the provincial government that it must take a lead role to implement and enforce legislation for the responsible use of off road recreational vehicles – from dirt bikes, snowmobiles and personal watercraft to quads and big wheels. This workshop will represent a variety of recreational groups, professional associations, agriculture, industry, enforcement and government. Policy recommendations for province-wide consistency in legislation, government leadership and recommendation on process are expected outcomes.

## Access Management Plans

The Ghost Access Management Plan (GAMP) has not yet been completed. This process has been bogged down for some time. Representatives from FAN and from the AOHVA, and the CCAS met early in January to discuss concerns that stakeholder groups are being played against each other in this plan, and in others in the

province. These groups submitted to the crown a request to meet together at one table, so that groups understand each other's perspective, and will be more inclined to work together on the implementation of the GAMP. In the Ghost area, there are timber permits, grazing leases and permits,

recreational trails (motorized & non motorized users, such as cyclists, hikers, climbers and equestrians), random camping, professional outfitters groups (some on horses, some in Hummers), trappers, the petroleum industry and hunters. Conflicts occur when several user groups are on the land at the same time.



## ALBERTA ISSUES

## Oil & Gas

In December 2004, the Energy & Utilities Board (EUB) issued a new directive to companies to properly abandon their wells within certain timeframes and to specific standards. About 116,000 wells and 300,000 km of pipeline (some abandoned 25 years ago) need to be checked to ensure that the abandonments were done properly.

Old or improperly sealed wells and pipelines could leak to the surface or downhole, which could possibly contaminate groundwater.

Last year 18,350 new wells were drilled, but only about 1160 abandoned. Despite record earnings in the petroleum

industry, the proportion of wells being properly abandoned has declined, compared to the number of new wells being drilled.

All wells in the province must be inspected and graded as to their risk level, in terms of public safety and the environment. Inactive high-risk wells must be properly abandoned by the end of 2005 and certain sour gas wells within 6 months.

Financing for the abandonment of wells is done through the EUB's licensed liability rating (LLR) program, which means all companies pay an annual levy based on how much it would cost to abandon all wells and

facilities. A new LLR program is being developed to deal with large facilities such as oilsands mines and natural gas processing plants. They are also looking at a similar program for power plants and electric transmission lines.

Industry can reduce its levies by reducing its liabilities - by properly abandoning facilities that are no longer in use. There are at least 42,000 oil & gas wells, and 7,000 petroleum facilities around the province that are inactive and waiting to be properly abandoned so they do not pose health risks to the public or environmental risks. This issue will continue to be a concern as the oil and gas industry winds down in Alberta.



## ALBERTA ISSUES

## Coal

Luscar and Fording have resurrected the Kitsam/Bow City Coal Project. The project will involve the mining of a massive coal seam running from Bow City east towards Brooks. It would involve mining activities on lots of native mixed grass prairie. Most of this land is owned by the Eastern Irrigation District and other private interests. Construction is scheduled to start in 2007. A new coal-fired power generating facility, with an expected life of 40 years, will be established on the Kitsim Reservoir (about 15 km east of Lake Newell) as well. Luscar Energy Partnership is a 50/50 partnership between subsidiaries of Sherritt International Corp. & The Ontario Teacher's Pension Plan Board.

## Saving water

To encourage citizens to reduce their water consumption, the City of Calgary is offering a \$50 rebate to residents willing to replace their conventional toilet with a water-efficient model. All communities should offer this incentive.

A new low-flow showerhead is available. The Bricor showerhead consumes only 5.7 litres per

## Market Action

In November 2004, Greenpeace Canada ([www.greenpeace.ca](http://www.greenpeace.ca) and at [www.kleercut.net](http://www.kleercut.net)) and the Natural Resources Defense Council (NRDC) launched a campaign against Kimberly-Clark for its major role in logging Canada's boreal forest. The groups want the company, the world's leading tissue product manufacturer, to use more post-consumer recycled paper or agricultural residues in its products. (For more information about Kimberly-Clark, go to <http://www.nrdc.org/media/pressreleases/041118b.asp>. For more information about the tissue product industry, go to <http://www.nrdc.org/media/pressreleases/041118a.asp>.)

"It takes 90 years to grow a box of Kleenex, but only a few seconds to throw away a tissue," said Richard Brooks, Greenpeace Canada's forests campaigner. "It's wasteful and irresponsible to use virgin wood fibre from ancient forests to make disposable tissue products like Kleenex when it could easily use recycled paper."

In 2003, Kimberly-Clark produced more than 1,275,000 tons of tissue products in North America, of which more than 30 percent came from pulp made from Canada's boreal forest. Its best-known brandnames include Kleenex, Scott, Cottonelle and Viva. Only 19 percent of the fibre Kimberly-Clark uses in North America is recycled.

The conservation groups are demanding that Kimberly-Clark:

- Stop using wood fiber from endangered forests in regions such as the Canadian boreal forest.
- Stop producing tissue products using only virgin wood fibers and instead maximize the percentage of post-consumer recycled content and agricultural residues.
- Buy from Forest Stewardship Council eco-certified forestry operations for the virgin wood fibers it does use. (For more information about the Forest Stewardship Council, go to: <http://www.fsc.org/fsc>.)
- Assure that none of its operations use mercury-based pulping chemicals.

minute, reducing water consumption by 40 per cent (standard showerheads use 9.5 litres per minute, low-flow showerheads average 7.6 litres per minute). The showerhead uses innovative technology to create a powerful shower stream without consuming a lot of water. The Bricor is not available in retail stores but can be purchased, upon request, from plumbing wholesalers.



## ALBERTA ISSUES

## Mountain Pine Beetle

The mountain pine beetle is chewing its way into this province as it migrates east from BC. Most of the lodgepole pine forest in Alberta has evolved without the presence of mountain pine beetle. Once the beetles enter pines, they introduce blue stain fungus, which destroys the wood and the market for the wood. Our National Parks are heavily infested. Controlled burns in Banff Park in 2003 were not hot enough to kill the beetles, even though the fires got out of control and burned more than planned. To the west, large swaths of beetle-killed pines will be cut in Yoho

Park, including at least 60 hectares around the Hoodoos campground. One hundred years of fire suppression and recent mild winters have allowed the beetles to proliferate. Due to large infestations in Banff National Park, the forested Crown land of the southern east slopes is currently of the greatest concern to the Alberta Forest Service. Willmore Wilderness Park is also being closely monitored.

Forest companies along the eastern slopes are on the alert and have been participating in volunteer surveys with provincial

government staff and natural history volunteers to track the beetles for the last 3 years. Since 1996, beetles have increased by 7-10 fold each year.

You are not permitted to carry pine logs with the bark on without special approval. Do not take your own firewood to campgrounds to help prevent the spread of this pest: To learn more: [www3.gov.ab.ca/srd/forests/health/mpb.html](http://www3.gov.ab.ca/srd/forests/health/mpb.html)

If you notice yellow-green or red brown crowns in pines, report it to: 1-877-927-BUGS (2847).

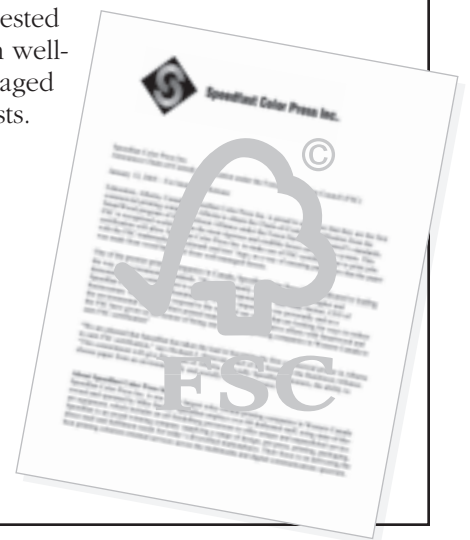
## Congratulations

The first US\$1 million Alcan Prize for Sustainability was won by the Forest Stewardship Council (FSC). A substantial portion of this prize will go to FSC Canada and the International Business Leaders Forum (IBLF). Robert Davies, CEO of the IBLF said "In our view, the FSC exemplifies an environmental and social NGO at the centre of an exceptional and innovative partnership among business, the public sector, and civil society to raise business standards and have a

practical impact on the pressing challenge of economic, environmental and social sustainability in forestry."

Speedfast Color Press Inc. of Edmonton announces that they are the first commercial printing company in Alberta to obtain the Chain-of-Custody Certification under the FSC standards. This certification will allow Speedfast Color Press Inc. to make use of FSC-certified paper to print jobs with the FSC trademarked 'checkmark

and tree' logo, as a way of ensuring purchasers that the paper was made from wood harvested from well-managed forests.



## FEATURE ARTICLE

# Winter Pronghorn on their Northernmost Range

BY BOB GAINER, FOREST GAINER, RHONDA MUNNS AND FRANÇ MÉS

*Alberta's northernmost pronghorn are found in the vicinity of Hanna, in south-central Alberta.*

As I describe below, this northern population of pronghorn seems more tolerant of adverse weather than the literature would indicate and it has proven very adaptable in responding to agricultural development of its habitat.

Highway 9, the Calgary to Saskatoon connector, is a major barrier to this population's traditional southerly movement in the late fall and winter of each year (Grue 2003). Every winter pronghorn groups build up on the north side of this busy Highway in predictable locations (Gainer 1991, 1995, Gainer and Hofman 1996). We located only three pronghorn groups that overwintered north of Highway 9 in 2003/2004; 25 animals at the Sunbeam turnoff 35 miles (58 km) west of Hanna, 32 animals on Wolf Creek 20 miles (35 km) north northwest of Hanna and an estimated 20 animals 20 miles (35 km) east of Hanna near Stanmore.

The winter of 2003 started early and was virtually without the customary warming and melting provided by chinooks, so that a

fair snow cover accumulated. Overnight lows in January 2004 were routinely in the  $-40^{\circ}\text{C}$  range with howling winds and drifting snow. On January 22 the worst winter blizzard in 26 years set in, followed by two weeks of severe weather. After a short break, 2 more weeks of extreme weather followed. In total there were almost 6 weeks of severe weather. The domestic livestock in the area suffered severe privation even with all the food and shelter humans could provide.

The three groups of pronghorn that we knew of had no shelter provided. Pronghorn prefer to be out in the open, even in harsh weather. They bed in almost invisible indentations, usually in the lee of snowdrifts and coulees and don't seek such shelter as windbreaks, buildings, trees, shrubs or even buckbrush (snowberry or silver willow) provide. For bedding they use only cold ground or snow. Moose, buffalo and deer all head for shelter of some kind during storms. Most locals have stories of these species taking refuge in

their buildings or livestock accommodations, but never of pronghorn. Even most barren-land caribou head for the trees during the winter, only the ultimate in winter adapted species, like muskox and Peary's caribou stay out in the open for the whole year.

We expected that if the animals did not move south they would be found frozen, starved or otherwise dead or dying in the snowdrifts. We thought nothing could survive that weather unprotected. But nothing could be further from the truth. When we went looking for them they were all up, alert and away at our approach. By the middle of March and more moderate weather, we counted at least 19 of the 25 at the Sunbeam turnoff and 29 of 32 at Wolf Creek. We did not keep track of the Stanmore group. There was very little mortality. Probably more survived than represented here, as the late counts were not as accurate as the early counts. These pronghorn were clearly tolerant of extended periods of severe weather.



“*In February, under a clear blue sky, a ground blizzard blowing on a north wind hid the Earth, and the whole world seemed one vast river of moving snow...*”

ANDY RUSSELL, THE CANADIAN COWBOY.

## Winter Pronghorn on their Northernmost Range...continued

The literature makes much of the importance of silver sage (*Artemisia cana*) to pronghorn diet in the winter. However, in our area pronghorn rarely use it if dryland cultivation is nearby. Silver sage may be a diet of last resort in an agricultural landscape: pronghorn utilizing silver sage are often observed to be in poor condition. During the severe winter of 1995-1996 the animals that stayed north of Highway 9 and relied on farmland for their survival did much better than the animals that moved south to silver sage dominated areas along the Red Deer River (~10% and ~50% mortalities respectively, Gainer and Hoffman 1996).

Pronghorn much prefer sprouting leguminous plants, volunteer grains and weeds in summerfallow fields and winter crops. Changes in farming practices associated with the abolition of the Crow Rate (a grain-shipping subsidy) in 1995 have been to the advantage of the pronghorn in this respect. What was formerly a grain-dominated landscape has become much more a pea, lentil, canola and bean landscape to supply the growing feedlot and swine industry. Also, where herbicides were used to control weeds and volunteer regeneration, this cost became less affordable. This all benefited the pronghorn, which seem to be most associated with non-cereal grain fields and their summerfallow. The literature does not recognize the

importance of these non-native foods in this northern population's diet (Gainer 1995).

Although grain is not the preferred diet of pronghorn, wheat probably was important to the winter survival of the herds north of Highway 9 in 2003/2004. The wheat harvest was good in 2003 and even old and poorly secured bins were used to store the grain. Some wheat was even piled on the ground. We examined several bins and piles and it was clear pronghorn were eating the grain.

Wheat is supposed to be poor pronghorn feed (Yoakum and O'Gara 2000). It is difficult for any species, even domestic farm animals, to consume it *ad lib*. Perhaps wheat is not a desirable food to pronghorn and their intake is limited enough that pathology does not occur. However, considering the severe weather in 2003/2004, wheat would have been a good source of calories with which to counteract the enormous loss of heat to the environment. In northern Alberta and the southern Northwest Territories domestic livestock will survive any winter if adequately fed and sheltered. Animals do not just freeze to death, they have to be underfed as well. In severe weather an increase in the grain ration helps combat hypothermia, apparently in both domestic livestock and northern pronghorn.

Pronghorn north of Highway 9 also take advantage of the

livestock industry. Hay bales left in fields and stackyards are nibbled at and when feed is spread onto the ground for livestock, the pronghorn (and deer and moose) will pick through it at night. If there is much snow they are often observed following behind cattle, bison and horses, which are better at exposing the feed.

However, despite the fact that pronghorn are very adaptable to cultivation and human influence of their environment, they are never very far from some native prairie, especially during the summer.

Pronghorns are at the northern limit of their historical range near Hanna, but their numbers are low. Low population size seems not because of a shortage of habitat or food or space or poor winter survival, but from predation, especially of newborns, by an increasingly large population of coyotes. After wolves were eliminated from the prairies man did a good job of controlling coyote numbers until about 1990, when the value of coyote pelts dropped from ~\$200 to \$20, primarily due to the anti-fur lobby. Now it is not worth the effort to trap or hunt them. Also fueled by the by-products of intensive livestock production (the carcasses of stock that don't survive to slaughter are often left to this handy cleanup committee) we now see many more coyotes roaming the countryside. Many ground-dwelling animals and ground-nesting birds also seem to have decreased in abundance as a result.

## FEATURE ARTICLE

## Winter Pronghorn on their Northernmost Range...continued

England's Farm Animal Welfare Council has five basic principles for animal care: freedom from malnutrition; freedom from thermal or physical discomfort; freedom from injury and disease; freedom to express most normal patterns of social behavior; and freedom from fear. A.J.F. Webster, formerly of the University of Alberta's Agriculture Department and now at Bristol, compares hens in "battery cages" and sheep in classic animal paradise grazing contentedly in a meadow: "The British suburban sheep kept underfed over winter on a soaking pasture may be half starved, uncomfortably cold and wet, suffer from crippling foot rot and parasitism, and be in constant danger of attack from marauding dogs. It is however free to indulge in normal activities (like panic and flight), so has attracted less concern from animal welfare groups than battery hens."

Driving through the countryside, the sight of free roaming pronghorn, North America's beautiful "gazelle" of wide-open spaces, makes our spirits soar. Most of us don't enjoy seeing

them, or animals like them, in a captive situation, but perhaps we should feel guilty for these feelings. The animals at the local zoo are much better cared for, even though it is under constant scrutiny and criticism. Is it necessary for pronghorn to be wild and free, starving and freezing to death, heavily parasitized and under constant threat of predation from unchecked coyote numbers? Do we actually pretend that there is natural regulation of pronghorn populations? Their wildness and naturalness are already compromised their occupation of and preference for farmland.

Perhaps a conservation organization could look into promoting a more humane coexistence with pronghorn in this area. Winter food for pronghorn would be easy to supplement. Every winter they aggregate along well-known barriers including Highway 9, the Red Deer River, and Highway 1. In these locations a few local farmers already leave strips of crops and forage, or

feed them grain to help them out. It would be easy to add a few supplements, like vitamins A and D and dewormers if feed stations were promoted. And perhaps a bounty for coyotes is needed, to restore the recent imbalance. The latter might also benefit many other species. If not for humane reasons, wouldn't hunting returns justify it?

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# 2004

## Federation of Alberta Naturalists Awards



### Dawn Dickinson

One of two Loran Goulden Memorial Awards was presented to Dawn Dickinson of Medicine Hat. The award, which recognizes long-term aggregate contributions to Alberta natural history, is named for Loran L. Goulden, noted Alberta naturalist who died doing the work he loved. Her accomplishments follow Loran Goulden's example of fostering amateur natural history study, contributing to our knowledge of Alberta natural history, supporting conservation of Alberta's natural heritage, showing leadership and a willingness to share knowledge.

Dawn has been a key member of the Grasslands Naturalists (GN) for 20 years, and is the major player in their involvement in conservation issues. Dawn also represents the GN on the FAN Board of Directors. Ms Dickinson has focussed her energy on the Cypress Hills in recent years. She organized and chaired the Cypress Hills Forest Management Workshop, provided input into the Cypress Hills Master Plan revision, sat on Cypress Hills Interprovincial Committee, & Research Steering Committee, and numerous others. She

initiated a partnership between GN, PFRA and a Cypress Hills rancher to rehabilitate a wetland in mixed grass prairie at Bare Creek. Presently, she is on the Elk Management Team. More than that, she is constantly in touch with Park managers to provide her considerable expertise on management issues.

Dawn has used her wide ranging skills, knowledge and expertise as a professional zoologist in virtually all conservation initiatives that have taken place in southeastern Alberta in the last 20 or so years. She has exhibited a single minded determination to base decisions on sound science. Dawn Dickinson is widely respected for her credibility and her integrity, and she will not be intimidated, nor abandon her principles.

She writes to promote conservation and has written film scripts, reference booklets and brochures, and "*Prairie River*", the excellent wildlife and canoe guide to the South Saskatchewan River.

Dawn Dickinson's commitment to the grasslands has been

extraordinary. Her writings and activities have allowed people to see the grasslands more clearly and with greater understanding. She has gained the respect of many of the area's ranchers. She has kept those responsible for grassland management on their toes. Even when not directly successful, her tenacity and valid arguments "raise the bar" and have had a long term, positive effect. Dawn is a passionate and knowledgeable advocate who works tirelessly to preserve the grasslands and the Cypress Hills.

Dawn also has been part of the Sage Grouse Recovery Team, CFB Suffield – Citizen's Environmental Protection Committee of Project Swiftsure, & feral horse committee, and Special Places 2000 nominations. In June 2003, Dawn received a Canadian Nature Federation Volunteer award, and in Feb 2004 received the Alberta Prairie Conservation Award.

### Olga Droppo

The second Loran Goulden Memorial award was presented to Olga Droppo of Calgary.

Olga Droppo, longtime member of the Calgary Field Naturalists' Society (CFNS) and volunteer at the

## 2004 Federation of Alberta Naturalists Awards...continued

Ann & Sandy Cross Conservation Area, was honoured for decades of work in the Calgary area. She has contributed extensively to local natural history literature. In 1980, she wrote the Carburn Park chapter of "Calgary's Natural Areas", published by the Calgary Field Naturalists' Society. In 1988, she published "A Field Guide to Alberta Berries" which was reprinted in 1994. All proceeds were directed to the Calgary Field Naturalists' Society.

In 1989, Olga saw a need and took action to computerize the CFNS bird record database, and organized volunteers to help with this project. Over ten years she spent at least one day a week entering data and supervising volunteers. 350,000 records were entered into the database – a staggering 4000 hours plus of volunteer time was required.

She did the first plant and wildlife inventory of the Ann & Sandy Cross Conservation Area, located southwest of Calgary. Olga still "keeps the lists" and continues to lead nature walks there and gives programs each year as part of their Conservation Education Programs.

For many Calgary area naturalists, their first exposure to the fascinating outdoor world has been with Olga teaching bird or plant courses through Inglewood Bird Sanctuary and the Cross Conservation Area, and the enthusiasm they carry comes from her wonderful teaching skills. Her skills range from

writing to teaching to research to mentorship. Her well-rounded knowledge of the environment and natural history is virtually unsurpassed.

Previously she received the CFNS President's Award, and the Calgary Mayor's Environmental award. Olga Droppo is a most deserving recipient of the Loran L. Goulden Memorial award.

*In addition to awarding the Loren Goulden Awards, three members of Alberta's natural history community were recognized for the significant volunteer contributions they have made to FAN.*

### Harvey Gardner

Harvey Gardner of Nanton has been a long time director of FAN. He began his involvement in 1977 as an elected director representing the Alberta Speleological Society, which was the year that organization joined FAN as a member club. In 1994 and 1995 he served as President of FAN, and has served as an appointed director since that time.

Harvey has served on many committees over the years. He served as the FAN representative to the Environmental Council of Alberta from 1983 to 1990, and was as a representative on the Provincial Coordinating Committee involved with approving nominations for Special Places 2000. He was a long time Chair of the FAN Constitution & Bylaws

committee, and currently (for the last 3 years) sits on the Issues Committee.

As a rancher, Harvey has a good grasp of how agriculture and the environment interact, and often offers meaningful insights on this in FAN meetings. He has been involved with the Alberta Surface Rights Federation for many years, and has been a vigorous defender of the landscape on a variety of fronts... recently opposing attempts of petroleum companies to drill wells in nearby ranchlands.

In the last 2 or 3 years, he has represented FAN on the Bison Review Committee, Bill 16, & at coalbed methane meetings. Currently he is working, as part of the Oldman Basin Carnivore Committee, on the problem of wolf kills (of cattle) with the Defenders of Wildlife, to come up with a solution so fewer animals will be killed. He also is working with the Pekisko Group on baseline studies of water and air quality, and vegetation in southwestern Alberta.

### Ruth Kleinbub

Ruth Kleinbub was appointed a FAN director in the 1980s, and at FAN's request, she, with her husband, started a club in Fort McMurray in 1988. The club was and continues to be very active, doing Bird & Floral Counts & a variety of presentations annually. The club was responsible for, and remains the steward of



## 2004 Federation of Alberta Naturalists Awards...continued

LaSaline Natural Area and has organized numerous visits into the site.

A dozen years ago, Ruth initiated the nomination of the Clearwater River (Alberta portion) as a Canadian Heritage River. The designation was finally made in late April 2004. The Clearwater River Committee developed a management plan for the river over a ten-year period, while the government made progress towards designation.

Controversial issues were dealt with through a consensus-based process. This winter, Millar Western began logging all of the old growth in the valley except the buffer zone around the ecological site at the eastern end of the valley. Ruth negotiated with Millar Western to save some of the old growth forest from the saw, which was an outstanding accomplishment!

Ruth was active in the Special Places 2000 committees for four Wildland Parks established in the North East. Battles were fought & lost, but some gains were made. She was also involved with the Corridor Pipeline, and a slight realignment was eventually negotiated.

For the last 4 years, Ruth has been the Fort McMurray Field Naturalist representative to CEMA (Cumulative Environmental Management Association) where she is Treasurer & sits on half a dozen committees. CEMA is the multi-stakeholder organization responsible for recommending

mitigation strategies to responsible regulatory agencies and government in view of the sixty-odd billion dollars of oilsands development surrounding Fort McMurray. (This association came into existence because of a Supreme Court ruling regarding a challenge based on the complete disregard of cumulative effects in the approval process for oilsand developments and expansions.)

Ruth is oftentimes the only voice in the management of this association advocating for transparency and honest, good science on which to make recommendations. Ruth is one of the very few vested solely in the interest of the environment and common sense. Her knowledge of natural history and of the traditional (aboriginal) knowledge gained from teaching in native communities gives her an unique perspective on the impacts of developments in this area.

Ruth has worked tirelessly for many years, almost in isolation, and FAN recognizes her energy, enthusiasm and determination to persist on many issues in the northeastern part of the province.

### Petra Rowell

Petra Rowell of Edmonton began her association with FAN during the first Alberta Bird Atlas Project. She was an integral team member, making sure that the volunteers got to the right areas and filled out the paper work. At the

completion of the field portion of the Atlas, she contributed her writing skills to the final book publication. She then left FAN's employment for the heady heights of employment with the provincial Fish and Wildlife Division, working on peregrine falcons. She did not forget her naturalist roots, keeping very busy with FAN member clubs. During this time she assisted in promoting FAN projects and was a frequent visitor to the FAN office. She also agreed to represent FAN on the Peregrine Falcon Recovery team and maintained that position for a number of years.

In the late 90's she became a FAN Director and in 2000 accepted the position of FAN Treasurer, which she held for two years. In that time she helped convert the financial systems into a more "project management mode" working closely with office staff. Even though busy with her young family and club responsibilities, FAN never missed a filing date for the various financial reports mandated on an annual basis.

Petra (with George Newton) co-chaired FAN's Bird committee, which is charged with focussing and coordinating FAN's bird related activities. She also worked on the Issues committee, and wrote Book reviews for Alberta Naturalist magazine. We want to thank Petra Rowell for her continuing contributions to the Alberta natural history scene.

## BOOK REVIEW

# The Buffalo Wolf...

## Predators, Prey and the Politics of Nature

BY SANDRA FOSS

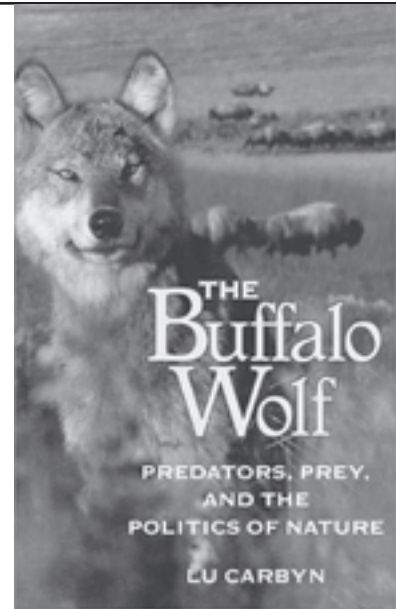
*Winner of the Canadian Geographic's  
"Top Pick" on Wildlife for 2004!!*

Lu Carbyn recounts in gripping detail stories of his visits to remote Wood Buffalo National Park to do scientific research on the predator-prey relationships of wolves and bison. The struggle for survival of North America's largest land mammal and the largest wild dogs on earth, the misguided management program, and the complexity of the social society of the "buffalo wolves", as well as that of a lone biologist struggling against the political flow, give us some understanding of why nature should be allowed to take its own course.

For me, this book called up vivid memories of travel in this wild part of our country, and the excitement of seeing wolves chase bison, wolves and bison swimming across wide rivers, and the eerie thrill of wolves howling by the light of the moon! Wood Buffalo National Park is the only place where wolves and bison have had a continuing relationship for many hundreds of years. Everywhere else, one or the other creature has been exterminated.

The author writes with passion, and his narrative evoked very strong emotions in me. The tenacity and ruthlessness of the wolves in their quest for food (the bison), the trials and tribulations of working with government committees, leading film crews in an unforgiving landscape, and the staggering impacts and implications of man's actions (effects of the Bennett Dam, import of plains bison) contrasted with the speed and agility of the bison when being pursued. These are the stuff of the drama that takes place in the north.

The impact on the wolves and bison might not be immediately apparent to those who would like to see more roads put into this landscape. But the stories of bison being chased up and down the winter road by wolves and by vehicles for many miles, while



**By Lu Carbyn** 2003 Smithsonian  
Books ISBN# 1-58834-153-4 **\$34.95**

trying to avoid deep snow banks, gives a whole new perspective to some of these animal interactions.

The life of a biologist is not comfortable in this terrain, and you will be surprised at this scientist's dedication in challenging weather and wildlife conditions.

The politics too are almost incomprehensible. There are those who would kill all the bison, because they carry some cattle diseases. There is anthrax in the soil and that won't go away, whether they introduce a "pure herd" or not. The bison are part of the heritage of the land, and of the people native to the land, by whom Dr. Carbyn is regarded as an "elder".

This is a story of adventure and intrigue, science and emotion.

---

### ABOUT THE AUTHOR

Lu Carbyn is a research scientist emeritus for the Canadian Wildlife Service, and an adjunct professor at the University of Alberta. He is co-owner of The Wild Bird Store in Edmonton.

# A Hammerhead Snake?

BY DENNIS BARESCO

*When it comes to nature and wildlife, Police Point Park in Medicine Hat is well known for the rare, unique and unusual. Even so, sometimes the interpreters at the Interpretive Centre are surprised at what shows up.*

Last summer, a gentleman visiting the Park saw something strange in the shallows of the river. When he pulled it out, he brought it to the Centre to share his bizarre discovery. A wandering gartersnake must have seen something good to eat, but unfortunately went just a bit too far. WHACK! A Fat Mucket Clam snapped shut, catching the hapless herptile in its clasp.

Fat Muckets must be able to close very fast in order to catch a speedy garter snake. Staff at the Centre wondered when this clam, which measured ~13 cm across, would decide it was safe to let go (the garter snake was already dead when the pair were



MEDICINE HAT INTERPRETIVE PROGRAM

found). Certainly not while it was out of the water and being handled! The visitor dutifully returned the clam - and its prize - back to the South Saskatchewan River from whence it came.

*“He...who can no longer wonder and stand rapt in awe, is as good as dead.”*

ALBERT EINSTEIN

## FAN CLUBS PAGE

# Fort Saskatchewan

## Naturalist Society (FSNS)

BY ALICE EASTON



*The Fort Saskatchewan Naturalist Society (FSNS) was founded by Elmer Thomas, in consultation with Alberta biologist Richard Fyfe, in 1981. The mandate of the society is “to promote awareness, appreciation, and conservation of our natural resources.”*

Initially, the club's primary emphasis was bird watching and identification, but the interests of current members vary greatly. Amongst our group we have an artist, a mycobiologist, backyard feeder watchers, and a photographer especially interested in raptors. However, we all share a fondness for the natural world. Our president, Suzanne Benoit, exhibits an extensive knowledge of natural and social history combined with an enthusiasm for bird watching. She collects and maintains a large archive of resource materials dating back several years.

The City of Fort Saskatchewan lies along the southern slopes of the North Saskatchewan River. The surrounding parkland provides the basis of local agriculture, mostly mixed farming, and habitat for a wide variety and numerous species of flora and fauna. To the east, Elk Island National Park, an island of

endangered mixed aspen parkland and prairie surrounded by a landscape of human activity, is less than a one-hour drive away. Northeast of Fort Saskatchewan, extensive industrial growth, based on the oil and gas industry, is ongoing. Due to continued growth and development, wild and natural places are increasingly threatened.

FSNS members, individually and jointly explore available spaces throughout the farmland, along the river, and the environs of the industrial lands. Birding continues to be a popular pastime and organized field trips, as well as more casual expeditions, provide enjoyment. Bird boxes, built during birdhouse building workshops, have been placed at the Museum, Historic Sites, and in the river valley. Since 1989, we have compiled data from Christmas Bird Counts, the count circle being centred one mile

northeast of the confluence of the Sturgeon and North Saskatchewan Rivers. More recently, we have conducted Annual Butterfly Counts each June. The FSNS became the Volunteer Steward of the Astotin Natural Area in June 1988. We view encroaching industrial development near the Astotin Natural Area with concern. Monitoring is ongoing: the natural area is visited at least once a year.

FSNS networks with other natural history groups such as the Edmonton Nature Club by attending conferences and special events. Our President keeps abreast of current issues as they relate to the environment and relays the concerns of our group to supportive affiliates. FSNS became an associate member of FAN in February 2002.

Currently, FSNS is studying a plot of land, the Westlands Area, within the western boundary of



## F A N C L U B S P A G E

Fort Saskatchewan. It is a combination of Environmental Reserve, Municipal Reserve and private lands. As early as June 2001, FSNS conducted a tour of the site. Participants included Patsy Cotterill (ANHIC), and Graham Griffiths, both well-known Alberta botanists. Since becoming aware that the area holds some rare native plant species, including crowfoot violet, FSNS has taken a proactive interest in the site. Fort Saskatchewan began gathering input on potential development in the area in 1997 as part of the Rivers Edge Planning Process. Current plans include residential and commercial construction, a public campground, golf course, sports areas, and trails for public recreation. FSNS strongly

advocates for a portion of the area under discussion.

Progress towards protection of the site has been slow. On June 17, 2002, we presented a brief to the City of Fort Saskatchewan regarding the proposed Westlands. The document contained information on the topography, soil description, and an inventory of plants found on the site. In particular, FSNS stressed the need to have the west end Interpretive Forest protected from disturbances by off-road vehicles. Reaction to the report was positive. In October 2004, our executive met with the Environmental Awareness Committee, Fort Saskatchewan, to reinforce our concerns. In February 2005, during our

monthly meeting, we enjoyed an interactive discussion with the Director of Planning and Land Development. We are developing a management plan and will seek grants to put our ideas into action. We intend to continue in pursuit of our mandate, once again, "to promote awareness, appreciation, and conservation of our natural resources." We invite interested nature conservationists, or anyone interested in the future of this remnant of threatened parkland to contact us by phone (998-1657) or email, [ghayward@shaw.ca](mailto:ghayward@shaw.ca) at any time. Members meet the first Tuesday of every month at the Fort Saskatchewan Library.

## WANTED:

### Historic Alberta, Saskatchewan and Northern Montana Sage-Grouse Samples

I am a Ph.D. student at the University of Alberta studying the genetic structure of Canadian and northern Montana Sage-Grouse. Part of my project involves comparing the genetic diversity of present and historic samples. The purpose of this is to determine potential causes for the decline seen in Canadian Sage-Grouse and to determine whether Canadian and northern Montana birds form a single population.

I am looking for people with birds killed prior to 1996 in Alberta,

Saskatchewan, British Columbia, or northern Montana (Blaine, Phillips, and Valley counties). For birds to be used in this study, I need to know the approximate time period (decade) and location that the bird was killed. Samples can be taken from mounted birds, skins, or collected feathers.

If you are interested in contributing to this research and have birds that fit these criteria, please contact me by email or mail for a sample collection kit and instructions. Thank you.



MALE SAGE GROUSE J.CARPENTER

**Krissy Bush**  
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Images courtesy of: the Provincial Museum of Alberta, Global Forest Watch Canada, and Jason Kasanovic

# Celebrating 35 Years

## **Towards the Appreciation and Conservation of Alberta's Natural Environment**

### **About FAN**

Thirty-five years ago six regional naturalist clubs came together for the good of both their collective membership and Alberta's natural history to form the Federation of Alberta Naturalists. Today, the Federation of Alberta Naturalists – comprised of 29 naturalists clubs, representing over 3500 individuals - presents a province-wide focus on natural history issues.

In recognition of FAN's importance in the province, FAN has been the recipient of the Premiers Award of Excellence (2004, 1998), the Emerald Award (1992), the Bighorn Award (1990), and the ESSO Volunteer Recognition Award.

### **Join Us**

Join the Federation of Alberta Naturalists on April 30, 2005 as it celebrates its 35th year with its annual general meeting followed by banquet and silent auction.

For more information about tickets to the banquet and silent auction please contact:

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Fax: (780) 422-2663 c/o FAN  
Email: [fan@fanweb.ca](mailto:fan@fanweb.ca)





# Nature *gallery*



**BEETLE GALLERIES** BRIAN R. PARKER

PHOTOGRAPHED IN DECEMBER 2004 USING A CANON AE-1 CAMERA, A 55 MM LENS AND KODACHROME 64 SLIDE FILM



The Federation  
of Alberta Naturalists