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CanadianWildlife from Moose to Marmot



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# An abounding wildlife in a big land

It is a truism to observe that Canada is very big, and yet it is almost impossible for a Briton to appreciate the scale of the country unless he has experienced it at first hand. "It is that feeling of fresh loneliness that impresses itself before any detail of the wild", wrote the poet Rupert Brooke, who traversed the country just before the Great War. One of the two largest countries in the world, with the longest coastline of any, Canada has a population less than a thirtieth of China. "The soul, or the personality, seems to have indefinite room to expand", said Brooke. "There is no-one else within reach, there never has been anyone; no-one else is *thinking* of the lakes and hills you see before you."

In this daunting, colossal landscape *homo canadensis* is a lilliputian figure. In Britain it is possible to believe that man has tamed his environment, enclosed it and organised it so that it poses no more than a minimal threat. Hardy Britons who venture into the national parks

on Dartmoor or Exmoor are not at risk from cougars or grizzly bears.

Man is only one of 163 species of land mammals now living in Canada. There are 33 species of whales as well, and over 500 species of birds. The country's three hundred thousand square miles of inland water are full of fish, and even great cities like Toronto have raccoons and skunks in their urban parks and back-gardens.

In this issue of Canada Today we report on Canada's wildlife and man's part in shaping its

conservation.



Raccoons — see page 8

The first Canadians were not in the least worried about the protection of wild animals. As far as they were concerned birds and animals were provided by a bounteous God to give them food to eat and warm clothes to wear. Besides, man in those days was so thin on the ground and wildlife so thick that conservation scarcely mattered. There was no

threat to any species.

Gradually this situation began to change, and as species became threatened so legislation was created to protect them. In 1794 Nova Scotia passed an act for the preservation of "partridge and blue-winged duck" (grouse and black ducks). Ontario introduced its first game laws in 1821, though it had no full-time wardens to enforce them until 1892. Prince Edward Island's first game laws came in 1906, and the North West Territories and British Columbia acquired them in 1913. But before this century conservation as we understand it was very much a minority interest.

That minority interest did exist. Naturalist societies were founded in Quebec City and Montreal in the 1820's, and in the late nineteenth century the first of Canada's great national parks were founded. The Glacier National Park in British Columbia was set up in 1886, and the Banff National Park which marches with it in Western Alberta followed a year later. In 1887 North America's first bird sanctuary was created at Lost Mountain Lake on the Canadian Prairies.

In 1916 conservation was recognised as a matter of international concern when Canada and the United States signed the Migratory Bird Treaty to protect hunted birds which divided their time between the two countries. Individual provinces still 'owned' the birds, but the federal government now assumed superior jurisdiction and took responsibility for them on their international journeys—rather as they did for their human travellers.

By now conservation was becoming a matter of more general and official concern. The national parks which had begun life as a mere 9 square miles around the mineral springs in Banff were increasing all the time. Four more had been established by 1911, and under an Act of Parliament that year a Commissioner of National Parks was appointed. Under his direction a further nine national parks were set up in the next twenty years, so that by 1930 when the National Parks Act was passed there were 29,000 square miles of park. Today there are more than 50,000, and some of the individual parks are bigger than some of the individual countries of Europe. A sobering thought.

Alongside the National Parks there has grown up a complex system of provincial parks, where wildlife is either rigorously and totally protected or at least subject to strictly interpreted game laws. Some of these are huge. Lord Tweedsmuir Park, named after John Buchan, the former Governor-General, is 2,299,500 acres of wilderness in British Columbia, and Algonquin Park, only 140 miles from Toronto and 100 from Ottawa, is 1,754,240 acres.

Nature however is not so easily ordered that it can be conveniently protected in parks and left to fend for itself in the rest of the country. There is plenty of wildlife outside the park system and it has to be safeguarded. In 1916 the Government established an Advisory Board on Wildlife Protection composed of scientists and administrators. In 1922 there were enough wildlife and conservation officials around for the first federal-provincial conference to be held. Such conferences are now a major annual event.

In 1947 the Canadian Wildlife Service was formed and continues to be the main conservation agency of the federal government. The federal government is responsible for managing migratory birds, marine animals and all wildlife in the national parks, and the CWS also works closely with provincial authorities. Among its many responsibilities it runs 94 migratory bird sanctuaries across Canada.

Marine mammals—mainly seals and whales—come under the jurisdiction of the Fisheries and Oceans Department, whose territory is infinitely greater now that Canada, along with several other countries, has extended for conservation purposes, its territorial waters to 200 miles. Canada has been acutely conscious of the dangers of marine pollution, and in 1970 passed the Arctic Waters Pollution Prevention Act to enforce anti pollution standards on ships passing through the Arctic and make their owners legally responsible for cleaning up any environmental damage the ships might cause.

Since 1966 when it was tabled in the House of Commons, Canada has had a fully coordinated National Wildlife Policy, under which the Federal Government is pledged, unequivocally, to make every attempt to enforce sound conservation policies for all wild species, whether whooping crane or prairie gopher.

"The young man looks at our abounding Canadian wildlife, and thinks that we have a precious heritage; the old man looks back at his youth and mourns for the vast numbers of wild things that now exist in a mere shadow of their former abundance; and whether young or old, we need to keep this matter constantly in mind, and be prepared to do our bit to hand on to our successors as full a measure as possible of the wildlife that we have enjoyed."

-William E. Saunders, "Canadian Science

Digest," 1937

# All creatures great and small

Canada's wildlife is not only prolific, it's different. Our two countries share squirrels and geese but surprisingly little else. What follows is a guide to some of the more distinctive Canadian birds, beasts, reptiles and fish—the ones you won't find in Britain except in Regent's Park or Whipsnade.



### Moose

There are probably half a million moose in Canada, short-sighted, rather dense, greedy (they eat as much as fifty or sixty pounds of twigs and plants every day) and huge (a big bull moose can weight up to 1,800 lb). Over the years there has been a shift in moose population. Next to marshes, they like scrubland and forest fires and lumbering operations have both opened up new areas for them. The ideal moose population is about one moose per square mile. Sometimes in

summer there is overcrowding when moose congregate in lush, willow-rich valleys and up to 35 per square mile have been reported. In winter such concentrations lead to mass starvation, for there simply aren't enough edible twigs above the snow to go round. Moose need to be managed, and with a little help they are now increasing in numbers. Newfoundland, for instance, which used be to devoid of moose now has a large population, all descended from a few pairs who were "seeded" there.

"The French Canadian fur traders of old had a name for the moose that was aptly descriptive. They called him l'Original, which embodies in its meaning grotesque, awkward, fantastic, and freak. So the name is fitting for the appearance of the moose, which under certain adverse conditions is anything but beautiful, while at his best he is nothing less than magnificent."

-A. L. Karras, North to Cree Lake (1970)



#### Beavers

The beaver is probably the most famous Canadian animal of all, a creature whose energy and ingenuity have made it synonymous with effective hard work. "To beaver away" is a perfectly legitimate expression dignified by inclusion in the Oxford Dictionary.

Ten thousand years ago they grew as big as bears, nine foot long and weighing up to 800 pounds. Today's animal is doing well to reach 100 pounds. Although indiscriminate trapping in former times once threatened his

"If the pig had his rights he would be our national emblem, instead of the beaver. What has the beaver done for us anyway? The pig, on the other hand, sustained our fathers in the fight against the wilderness and yet his name is a name of scorn."

-Peter McArthur, "In pastures green," 1915

survival, recent conservation programmes have long since restored him to prosperity. Beavers are alive and well and living all over Canada, except in the Arctic and on some offshore islands.

Inroads on the beaver population began in the early seventeenth century, after it was discovered that beaver pelts made extremely elegant hats. At the peak of the beaver trade 170,000 pelts a year were sold in London and Edinburgh. The advent of the silk top hat knocked the bottom out of the business however, and now that hardly anyone wears hats anyway, beaver is used mainly in fur coats. Beaver pelts are a profitable Canadian export, but the business is now so strictly controlled that the problem is not how to protect the beaver population but how to harvest enough to prevent over-population and resultant starvation due to exhaustion of food supplies.

Beaver are chunky, stocky creatures on dry land but graceful in water, where their long flat tails help to propel them at about two or three m.p.h. on or below the surface.

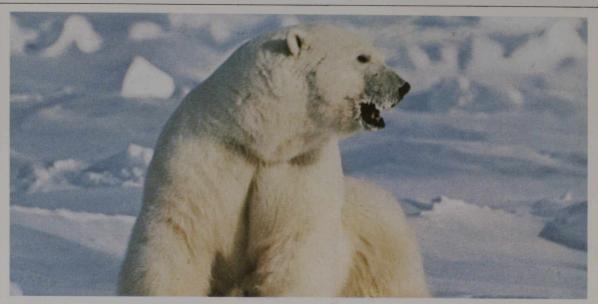
They are best known for their dambuilding, the purpose of which is to surround their house with protective water and to form a pool so deep that there is always some unfrozen water under the winter ice for swimming in. Dams can be as high as or higher than six feet and as long as 50 yards. The beaver's lodge in the centre of the pond may be his home for many years. It is built on a base of sunken poles and is six to nine feet high with a diameter of ten to twenty feet.

The centre chamber has a sloping floor of dry, shredded willow bark. A beaver family has ten to twelve members—the adult pair, kits and yearlings of the previous year. Now that man has been subdued, beavers' most dangerous enemies are otters, which can enter the lodge via its underwater door and attack them inside.

The beaver has long been one of Canada's national symbols. When Max Aitken, one of Canada's more famous exports, was elevated to the peerage in Britain, he took the title Lord Beaverbrook and was generally and affectionately referred to as 'the Beaver'.

"His shape is thicke and short, having likewise short legs, feet like a mole before, and behind like a goos, and a broad tayle in forme like a shoo-soale, very tough and strong; his head is something like an Otter's head, saving that his teeth before, be placed like the teeth of a Rabbit, two above and two beneath, sharpe and broad with which he cuts down trees as thick as man's thigh."

—An early writer named Wood, describing the beaver



### Bears

Polar bears are occasional cannibals who have been known to be killed by wolves and walrus, but their main threat comes from man. In Northern Canada, home of half the world's polar bear population, Inuit (Eskimo) income from bear hides can be substantial. Because

"I was lonely after you had gone. I turned straight and climbed to Lake Agnes, and there sat and looked at the valley down which your train had vanished. After a bit seven females rushed up and said 'we have seen a bear. Will you protect us back to the Hotel S?' I replied 'I want to be alone. There are already too many females in the world. Go. And I hope you meet the bear.' They went. And I could not see them in the hotel that evening. I suppose they did meet the Bear.' — Rupert Brooke, letter to the Marchesa Capponi, 1913.

the bears wander throughout the entire Arctic coast international co-operation is needed to conserve them and the governments of Canada, Greenland, Norway, the USSR and the USA are in broad agreement about the need to protect them. There are probably about 10,000 Canadian bears. In size they are much the same as brown bears, reaching over 1,200 lb. They can run at speeds of up to 18 mph across the pack ice, are prodigious swimmers who can stay under water for at least two minutes at a time. Since the advent of man polar bears have been known to eat cheese, tea, apples, engine oil, flour, biscuits, rope, canvas and cardboard. Basically however they prefer meat, especially seal.

"The Grizzly Bear is huge and wild He has devoured the infant child. The infant child is not aware He has been eaten by the bear." — A. E. Houseman, "Infant Innocence"



In 1953 the grizzly bear was reclassified and assigned to the ranks of brown bears, but even after this demotion it has to be conceded that the grizzly is a very special sort of bear. It is big, strong, powerful and mean when cornered. Its only natural enemy is man, though not so much through sport hunting as through the continual eroding of its habitat by the increase of human settlement.

Black bears are about half the size and twice as common. An adult male is 300 lb

rising to an occasional and very exceptional 600 lb. Black bears like carrion, honey, ants, grasshoppers and a wide variety of berries, but when they can, prefer to take the easiest food of all—handouts from unwise tourists in the national and provincial parks. Bears are unpredictable in behaviour, so those that hang around campsites are trapped, transported 200 miles out into the wilderness, and released.

"Bear There. Staring. She stared back.

Everyone has once in his life to decide whether he is a Platonist or not, she thought. I am a woman sitting on a stoop eating bread and bacon. That is a bear. Not a toy bear, not a Pooh bear, not an airlines Koala bear. A real bear.

Half a bear, actually, and not a very big half, for it lay tentatively in his doorway so that she had no idea of its size. It was only a dusty bulk of blackish fur in a doorway. It had a long brown snout, and its snout had a black, dry, leathery end. It had small, sad eyes."

-Marian Engel, "Bear," 1976

# **Whooping Cranes**

In 1941 there were only fifteen whooping cranes left and they seemed doomed to extinction. Their habitat had been destroyed and they had been drastically over-hunted. Since then intense efforts to preserve and increase

them have been made until there are now fifty wild birds migrating between Canada and Texas. Another twenty are in a captive breeding programme in Maryland, USA. They are the tallest of all North American birds—over five foot.



# Dall's Sheep

More wary and agile than their close relatives the Bighorn, Dall's Sheep also have particularly keen eyesight and a highly developed sense of smell to help protect them from predators, which include lynx, wolverine, coyote, wolf, grizzly bear and golden eagle. These sheep are an important food source for

Indians and Eskimos. The diet of these impressive creatures is comprised mainly of grasses and sedges found in the mountain ranges of northwestern North America. Rings on the magnificent horns of the rams denote the age of the bearer. The horns play a significant part in the butting jousts which take place every autumn during the mating ritual.



# Bison (see cover)

The bison used to roam the North American plains in vast herds but by 1880 they had almost disappeared except for a few small captive herds. In 1873 an Indian rancher in Montana saved four calves and bred so succesfully from them that by 1914 he had a herd of 700. That year the Canadian government bought the herd and released it in Wain-wright Buffalo National Park. Today it numbers between 40,000 and 50,000 animals.

"The trails crossed the domain of the buffalo whose numbers in the early seventies, were still legion. The open prairie was covered with their dried dung, which provided the only fuel for hundreds of miles; often, too, it was white with their bones—so many that, from a distance, it seemed as if a blizzard has covered the grass. As late as 1874, when the newly formed North West Mounted Police made their initial trek across the plains, their colonel estimated, within the range of his own vision, one million head stretching off to the horizon. And the sound of them! To the Earl of Southesk, "The deep rolling voice of the mighty multitude came grandly on the air like the booming of a distant ocean." This was a domain which few men ever saw; it could not exist for men. The railway would mark its finish.

Pierre Berton, "The National Dream," 1970

Raccoon (see page 2)

The bold bandits of the animal world, the raccoon is primarily a nocturnal beast who hides by day in hollow trees. At ease with humans, raccoons often make their homes in cities like Toronto in chimneys which have been blocked off after the installation of central heating systems. They eat almost anything, especially garbage, and have no problem opening "raccoon-proof" dustbins and getting into the best-bound plastic bags. Many an unwary camper in the woods has awoken in the morning to find a raccoon had already consumed his breakfast. Despite their endearing appearance, especially their darkrimmed, hung-over eyes, they are inevitably regarded as somewhat of a nuisance. Davy Crockett, of course, wore a hat made of coon, complete with tail.

"I have been often asked what my work consists of. I want to arouse in people a sense of responsibility for that north country and its inhabitants, human and animal... I have been asked where I got the power. It is not me at all. I have behind me that immense north."

-Grey Owl, the Canadian naturalist who posed as a North American Indian, and who was discovered after his death to have been born an Englishman, Archibald Belaney.



### Musk Oxen

Many Canadians have never seen a musk ox. The animal lives too far north, mainly on the Arctic islands, though there are still some large herds on the northern mainland. Musk oxen eat the dwarf willows, saxifrages, grasses and sedges of the Arctic tundra, and their thick, almost neanderthal, shaggy coats protect them against the cold. Their main enemy is traditionally the wolf, against whom they protect themselves by forming circles cows and calves on the inside, bulls on the perimeter-rather like a waggon train of pioneers fighting off Indians. Legislation protects them from overhunting by man, and they are reasonably plentiful. With their humped shoulders and broad, curved horns they are imposing and not entirely unbeautiful, particularly in the paintings and carvings of the local people.



"Tell me, Father, what is the white man's Heaven?"

"It is the most beautiful place in the world."

"Tell me, Father, is it like the land of the little trees when the ice has left the lakes? Are the great musk oxen there? Are the hills covered with flowers? There will I see the caribou everywhere I look? Are the lakes blue with the sky of summer? Is every net full of great, fat white-fish? Is there room for me in this land, like our land, the Barrens? Can I camp anywhere and not find that someone else has camped? Can I feel the wind and be like the wind? Father, if your Heaven is not all these, leave me alone in my land, the land of the little sticks."

-Conversation between a Dogrib Indian and an Oblate missionary, quoted by P. G. Downes in "Sleeping Island: The Story of One Man's Travels in the Great Barren Lands of the Canadian North," (1943)

# Chipmunks

Canada boasts two sorts of chipmunk. The easterner is larger and stouter than his western counterpart (an accusation occasionally also made of homo canadensis) and has wider stripes, though the easterner has such a bright reddish brown rump that it is sometimes impossible to see his stripes at all. Westerners have more offspring. They all eat nuts, berries, insects and, occasionally, birds' eggs. They are close cousins to squirrels, but prefer burrows to tree trunks for their homes, and, unlike most squirrels, hibernate in winter.

### Wolves

All wolves in Canada are grey wolves but there are twenty-three varieties of grey wolf, so that the Canadian family is not as uniform as one might suppose. The largest are found near the Mackenzie River and the fastest run at 28 mph. They are predators who will go after anything, including in a pinch untasty

"Wolves are scarce in Canada, but they afford the finest furs in all the country. Their flesh is white, and good to eat; they pursue their prey to the tops of the tallest trees."

-William Guthrie, "Guthrie's geographical

grammar," 1807

"Any man that says he's been et by a wolf is a liar."

— "Sam Martin" of Algoma, about 1910, attributed by J. W. Curran in "Wolves don't bite," 1940

humans, and will sometimes kill some animals for pleasure. The pelts are worth little, but provincial authorities have sometimes encouraged the killing of wolves in order to increase the stock of their natural prey such as caribou, moose and elk. When it comes to food in the northern lands which are the wolf's natural habitat, aboriginal man and wolf are in direct competition.



Wilderness in Canadian mythology

The concept of "wilderness" occupies an important place in Canadian mythology. The facts of modern Canada are largely urban facts, industrial facts, with 76.1 per cent of the population living in towns and cities. But Canadians remain aware that, historically and geographically, vast areas of wilderness form a backdrop to their way of life.

Indeed the very fact of urbanization appears to be generating a reaction—both in terms of growing numbers going out of the cities to renew contact with nature in the wild acres of the national and provincial parks, and in the increasing vigilance of conservationists over areas which may be threatened by development.

Great steps have been taken in recent years towards the development of workable machinery for balancing out the various interests at stake in the environment.

Aside from the people immediately concerned, there is growing public interest in environmental issues: when Judge Berger held a meeting in Toronto to discuss the Mackenzie Valley pipeline, nearly 700 people attended on the first day alone.

"It is no coincidence that our national emblem is not a rising sun, a star, a hammer, a sickle, or a dragon, but a beaver and a maple leaf. Nor is it coincidence that there are more paintings of wilderness lakes, spruce bogs, and pine trees on more Canadian living room walls than in any other nation on earth. We may scoff, we may deny, but the wilderness mystique is still a strong element of the Canadian ethos."

-Fred Bodsworth, "Quoted by Richard C. Bocking in Canada's Water: For Sale?"

(1972)

### Caribou

Caribou are the deer of the far north, covering enormous areas in their migrations and searches for food, when alarmed running pell mell across the barren ground with a sharp clicking of the tendons which can be heard

for miles around.

In a 1972 study of the Kaminurial Herd for the Canadian Wildlife Service, Gerald Parker concluded that "the caribou has survived because it has evolved marvellously to fit its environment. They seem to seek out the cold —the Porcupine Herd of the Yukon winters in the coldest spot in North America, Ogilvie Range, where the temperature often drops to 80 degrees below for a month".

They are indeed remarkably resilient, surviving howling winds, scant food, clouds of summer insects, Inuit hunters and swarms of scientists, but fifty years ago their survival appeared threatened. Their primeval population may have been two and a half million, but intensive hunting, forest fires, and high calf mortality had conspired to reduce them

to some 200,000 by the 1920s.

The animals were protected from most

Canadians by strict game laws, but Inuit and Indians were allowed to continue hunting them at will. The caribou was part of their life in much the same way that the cow is part of British life. In this case therefore, wildlife management soon came to consist primarily of people management. Indians and Inuit were given fishing nets and encouraged to feed their sled dogs on fish. The annual caribou hunts were organised and supervised to avoid over-kill, and a temporary wolf control programme was instituted. Today the caribou is back up to 900,000 and steadily increasing.

At present, conservationists are concerned with the possible effects on the caribou of gas and oil pipelines and the increasing presence of man. When a two-mile simulated pipeline was constructed across migration paths, out of 5,600 animals approaching the pipe only 1,800 crossed over by the gravel ramps or underpasses provided. About 2,500 eventually found the end of the pipe and went around, but fully 2,000 turned back altogether. That's not conclusive, but it is dis-

turbing.



#### Seals

It is impossible to consider Canada's seals without considering their annual cull.

There have been and are two views of the harp seal hunt which takes place each spring off the coasts of Newfoundland and in the Gulf of St. Lawrence. They involve emotions, aesthetics and economics. There are honest people on both sides, and on two points there is no real disagreement: The hunt is harsh. and it has been going on for hundreds of vears.

There are other areas in which—to the surprise of many—there is also agreement among scientists and other objective observers: The harp seal is not an endangered species. Seals are not skinned alive. The seals taken are not all young whitecoats. (Indeed whitecoats account for much less than half of the total.) The hunt is the most closely regulated killing of wild animals in North America. It is also a vital part of the subsistence incomes of the people who do the hunting.

It is difficult for some animal lovers, particularly those living in urban areas far from the northern seas, to understand the hunters' viewpoint. It is difficult for the hunters to understand the logic of those who would

abolish their jobs.

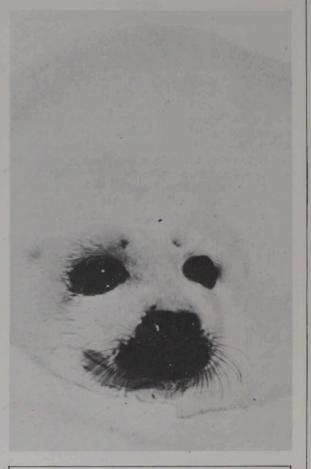
Harp and hooded seals have been hunted off the coasts of Newfoundland and in the Gulf of St. Lawrence for hundreds of years.

"Look. We live here on this little rock. We have to make our living off it. Conservation means more to us than it probably does to you. We're careful, I mean, what we do with our moose. We're careful with our lobsters. Can't you see we're the last people on earth who would want to wipe out the seals?"

- Eli Bryant, interviewed by Sandra Gwyn.

"Saturday Night," 1977

The harp seals travel in herds, moving south from the coast of Greenland and the Canadian Arctic to winter in the Gulf of St. Lawrence and off the northeast coast of Labrador. In late February or early March the females give birth to single pups, weighing about fifteen pounds. The young are called whitecoats, although the pup's temporary coat is transparent rather than truly white. The hair focuses the sun's heat on the animal's skin, protecting it from the cold, while a thick layer of insulating blubber is built up. The mothers nurse the pups for three weeks with a milk of astonishing richness, and the pups gain nearly eighty-five pounds. The pups' coats then change to mottled grey, and the mothers abandon the pups. Female harp seals have pups yearly for as long as twenty-five years.



"The protest groups, while all of this is going on, are battling for our attention with the intensity of rival television networks. Round One to Brian Davies, who arrives with Yvette Mimieux, direct from Hollywood. Mimieux is wearing a pink sweater and a nifty blue Arctic suit, and she tells us that sealing, like slavery, is obsolete. Round Two to Greenpeace. The day the hunt opens, their leader, Paul Watson, chains himself to a cable hauling seal pelts aboard a ship and gets dunked in the North Atlantic. (People who don't know what they are doing shouldn't be allowed out there." says Davies.) Round Three, in spades, to Franz Webber, who produces Brigitte Bardot, in a red turtleneck, out of a chartered jet." -Sandra Gwyn, "Saturday Night," 1977

Three groups hunt seals: the sealers from large vessels, the landsmen of Newfoundland and the coastal islands, and the native peoples of the Canadian Arctic and Greenland.

The large ships, under Canadian and Norwegian flags, are the only vessels capable of reaching the whelping ice, and they hunt whitecoats almost exclusively. (By law, no more than five per cent of their catch may be over one year old.) The large vessel hunters take the fur, flippers and fat of the whitecoats,

Each whitecoat has about forty pounds of fat, or blubber, which is used for oil. The flippers

are a delicacy in Newfoundland.

From 1972 to 1976 large vessels were barred from the Gulf, and few whitecoats were taken. The herd built up, and Gulf permits have been issued for vessels manned by sealers from the Magdalen Islands—an area where landsmen normally hunt whitecoats but where the hunt has been unsuccessful in recent years.

Most landsmen take beaters (older than whitecoats but under one year old) and bedlamers (immature seals over one year old). They reach the ice on foot or in small vessels. Most use the meat as well as the fur, flippers and oil. The natives of the Canadian Arctic and Greenland also take older seals which are

used for food, clothing and trade.

The hunting days are few: The birthing season is short, and the Canadian government sets a strict quota. The quota for all harp seals this year is 180,000 of which 20,000 is reserved for Norwegian vessels and 10,000 for Inuit hunters. Quotas are rarely obtained, and in any event are set far below the total pup production (345,000—358,000).

"The current population of harp seals could

"The current population of harp seals could stand an annual catch of 214,000 to 240,000, animals and still enough young seals would enter the herds to replace the adults that die due to natural causes, and we are allowing a

harvest of 180,000 animals," says M. C. Mercer, Associate Director of the Fisheries Research Branch in Ottawa.

"We want the harp seal herds to increase to 1.6 million animals," says Mercer. "That is why the seal quotas are set at 180,000 instead of the permissible 214,000. We expect that the seal herds will number the 1.6 million

animals within five to ten years."

The harp and hooded seal harvest in Canadian waters is controlled by comprehensive Seal Protection Regulations. Each of Canada's large sealing vessels has fishery officers on board to maintain close surveillance on the sealers to ensure that the quotas on numbers of seals taken are not surpassed and that all other regulations are obeyed.

All sealers must be licensed. Before the licensing, they are given lectures and instructions on sealing regulations, particularly on methods of humane killing. All novice sealers must serve an apprenticeship with exexperienced men. The fishery officers have the power to suspend the licence of any sealer and remove him from the ice if the officer believes that the sealer has violated the regulations.

As a result, "...the harp seal is very probably the best managed wildlife species in Canada," says Dr. Fred Gilbert, professor of wildlife management at the University of

Guelph.



As part of a continuing series portraying wildlife, the Canadian Post Office has issued a series of stamps, created by artist Robert Bateman, drawing public attention to endangered

species.



# Eastern Cougar

Also known as the panther, painter, puma, mountain lion catamount, Indian Devil, and pi-twal—the long-tailed one. It is one of five cougar races living in Canada. The Eastern Cougar and its colleagues evolved during the heyday of the sabre-toothed tiger and spread from Atlantic to Pacific and from northern Canada to southernmost South America. The white man drastically transformed the cougar's environment and because of fear or a desire for status as a hunter, killed the animal whenever possible. Soon everyone concluded the cougar was extinct in eastern Canada and anyone claiming to have seen one was suspected of being overly fond of the bottle.

Oddly enough, man's activities inadvertently saved the Eastern Cougar from annihilation. Logging, farm abandonment and fires changed the character of the New Brunswick forest, making it ideal territory for deer, the cougar's favourite food. The naturally solitary panthers took to the remotest parts

of the backwoods where there was plenty to eat and little human activity. The cougar population stabilized and even increased somewhat.

A male cougar can grow up to nine feet long and weigh 280 pounds but the average male is six to eight feet long and weighs between 100 and 200 pounds. Females are generally one-third smaller. The cougar's coat varies from reddish brown to greyish brown or even black. Females start breeding when two or three years old and produce an average litter of two cubs. A cougar's vocal repertoire ranges from purrs, hisses and mews to growls and screams. One commentator feels that a noisy cougar started the legend of the Dungarvon Whooper, reputedly a murdered New Brunswick lumberman who returns from the spirit world to lament his fate.

The cougar preys on a great variety of animals which it stalks by day and night. The big cat kills deer by snapping the victim's spine. It rarely makes ferocious unprovoked attacks on man, but is nevertheless regarded in dread. Yet it on more than one occasion has

been treed by a small, yapping dog.



# Peregrine Falcon

If the environment is too polluted for the peregrine falcon, perhaps humanity itself will one day succumb. The new endangered wild-life issue thus conveys a sombre warning.

The peregrine falcon, or "duck hawk", inhabits all but the remotest or harshest places on earth. Three races are found in Canada—one on the British Columbia coast, one in the far North, and a third in other areas.

The effects of DDT and other insecticides have stricken the once indestructible peregrine and other raptors such as the bald eagle, the osprey and Cooper's hawk. With every meal they absorb small quantities of chemicals which become concentrated in the body to such an extent that the buildup of noxious substances eventually either kills the birds or disrupts reproduction. Conservationists and environmentalists are concerned that seemingly innocuous chemicals now entering the environment could eventually destroy mankind.

Though the loss of any species is a pity, the disappearance of the peregrine falcon would be especially tragic. Among the fastest of all birds, it can dive at approximately 200 miles an hour. Speed, as well as a superbhunting technique and incredible eyesight, endeared the birds to falconers for thousands of years and helped publicize Canada's Arctic islands during medieval times. Marco Polo wrote that the Arctic Ocean contained "certain islands in which are produced numbers of gyrfalcons and peregrine falcons which are carried in many directions."

The crow-sized adult peregrine is 15 to 21

inches long, weighs 1½ to 2 pounds, and has a 38 to 46-inch wingspread. The female, called the "falcon", is larger than the male, or "tiercel". Both prefer to eat pigeon, though they will dine on anything from mallard ducks to warblers. Fondness for pigeons rendered the peregrine falcon unpopular during World War II, forcing the British to destroy local peregrines to protect pigeons carrying secret messages. The passenger pigeon's demise probably hurt the falcon in North America; however, it survived, but only to fall victim to chemical poisoning.



### Whales

The Whales—Blue, Humpback, Right, Grey—are all protected by the International Whaling Commission. The British, the Norwegians and Dutch, the United States and Canada had all stopped commercial whaling by 1972. Today Japan and the USSR take over 85 per cent of the annual catch.

The Blue Whale is the largest animal on earth (up to one hundred feet and weighing up to 145 tons). Its heart weighs as much as a thousand pounds, and its brain can weigh as much as twenty. Its arteries are as broad as fire hoses and are protected from the cold by blubber two feet thick. Once abundant around the world, it now numbers between three thousand and six thousand.

The Humpback, short (fifty feet), has never recovered from the hunting excesses of the

late nineteenth century and now numbers between seven thousand and eight thousand. The Right Whale, about sixty feet long with a large wartlike lump on its snout, was the first whale hunted—its name derives from the hunter's joyful shout, "that's the right one," It was almost wiped out during the eighteenth and nineteenth centuries. It now has full protection, but its recovery rate is very slow and its numbers few.

The Grey Whale, about fifty feet long, was almost exterminated by whalers in the nine-teenth century. It is now fully protected; and, it is pleasant to report, has made an impressive comeback and now numbers about seventeen thousand.

In addition to the whales which are protected fully, the International Whaling Commission sets quotas to protect other species.



### **Marmots**

Marmot is the generic term to cover the woodchucks ("How much wood could a woodchuck chuck if a woodchuck could chuck wood?") and groundhogs of eastern and central Canada and the marmots of the western mountains. The rarest Canadian marmot is the Vancouver Island marmot, of whom fewer than a hundred survive. His cousins, the hoary marmot and the yellow bellied marmot, are more numerous, and woodchucks and groundhogs abound. All are chunky, short legged animals weighing between four and twenty pounds. In autumn, just before going underground to hibernate, woodchucks and groundhogs stuff them selves very fat indeed, but by the time they come up for spring they have a most lean and hungry look. Some groundhogs become confused in midwinter spells of mild weather,

and surface to see what is going on. Any schoolboy in Canada knows that the ground-hog comes out on February 2nd, Groundhog Day, to see how much longer winter will last. If he can see his shadow, goes the tradition, winter will hang on another six weeks, and the groundhog hastily goes back to sleep.

"Lets face it, Canadians seem to have gone conservation crazy. A hundred years ago you could shoot anything that moved, from a moose to a marmot. Nowadays you practically have to get permission just to catch a mouse!"

—Deborah Mason, Toronto journalist and broadcaster.

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