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SAVING A BIG LAND

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people, the wildlife and what the Eskimos call "the Big Land"?

The trans-Alaska pipeline is the greatest private construction project in human history. A slender ribbon of steel wandering almost 800 miles across the largest of the United States.

Alaska is immense -- one of the world's last and largest wilderness areas. Like many developing nations, it is beset by the conflict between economic growth and preserving its environment.

The United Nations system has long been seeking ways to reconcile these aims -- to encourage development, but to protect the people and the land.

On the North Slope of Alaska, rich oil reserves were discovered in 1968.

Public interest in the environment emerged at just about the same time, and the remote tundra became a battleground of ecological conflict.

Echos of Alaska were heard at the UN's 1972 Environment Conference. Afraid that the environment issue might be used to stifle their economic growth, developing nations insisted that protecting the environment must go hand in hand with development.

AIRPLANES 120

Alaska became the first important test case. Today, in a 20th century replay of the Gold Rush, thousands of people are arriving in Alaska with hope of participating in the oil boom.

128

The oil made new millionaires, and now jobs.

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L.S. ANCHORAGE 134

In Anchorage, where most of Alaska's people live, prosperity is evident everywhere, but it is accompanied by inevitable drawbacks.

139

TRAFFIC 141

Out-of-state vehicles are creating the state's first traffic jams.

143

SUPERMARKET 145

The cost of everything has exploded. Some outsiders move in trying to grab the best jobs. Others less qualified, swell the ranks of the unemployed.

STREET SCENES 154

ESKIMO DANCE AND CRAFTS 159

In this surge of modern life, native Alaskan traditions, arts and crafts could be overwhelmed.

163

Even in the midst of the economic boom, tradition remains high among Eskimo values.

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176

Alaskan Eskimos are determined to keep their traditions alive - but to combine the best of the old and new.

180

SCENIC MOUNTAINS 184

The arrival of 20th century technology offered new job opportunities to native Alaskans, throughout the land.

188

VALDEZ CONSTRUCTION SITE 192
196

Because of local pressures, the project was committed to put qualified Alaskan at the head of the line for jobs.

200
204

Special training programmes were set up to teach them the skills needed in the pipeline project.

206
219

From the beginning, preserving the Environment in Alaska meant people as well as landscape and wildlife. In 1970 new laws were enacted in the United States requiring environmental impact studies on major development projects before construction could begin. The resulting court battles over the pipeline cost the oil companies time and money.

TRUCK 220

Because of an aroused public, the biggest private construction project in history ground to a halt.

225
STACKED PILES 227

For three years, nearly 800 miles of pipe, stacked along the proposed route had become a symbol of public vigilance. People who cared about the environment and were willing to fight for it, saw to it that development would proceed only if new rules were defined and new demands were met.

239
MIDNIGHT SUN 243
246

On the North Slope, drilling rigs loomed like strange ships floating on a tundra sea.

DRILLING 248
250

While exploration for oil continued, some hard questions were asked.

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PIPELINE

BP OPERATIONS CENTER

Would drilling for oil make a few big companies rich at the expense of native Alaskans?

Would the pipeline destroy the delicate balance of Alaskan wildlife?

Would development threaten the environment forever despoiling "The Big Land"?

These questions have not yet been fully resolved, but in the struggle to find answers, some undeniable benefits have achieved.

The economy of Alaska gained a much needed impetus. Millions of dollars for the state treasury, and jobs for Alaskans.

Eskimos, Aleuts and Indians found a way to retrieve their native lands and acquire substantial income from mineral rights.

All of this, due in one way or another to the discovery of oil on the North Slope.

In 1973 the oil companies finally got permission to build the pipeline. But it would be done - like few other projects in the past - with a new concern for the total environment.

Like a space station landed on the vast expanse of the tundra, the Operations Center of BP Alaska provides living quarters for specialists and technicians, necessary to the development of oil reserves.

VOLLEYBALL	315	The new structure is designed to help these workers adapt to the long summer days and the endless winter nights of the North.
	320	
SWIMMING	322	Unaccustomed to the rigorous climate, the workers bring their climate with them - and their way of life.
	326	
DINING ROOM	332	The Center is not just a warm refuge from the cold reality of work in the Arctic.
COMMUNICATIONS	338	It is the nerve center vital to the work at remotely scattered locations on the North Slope.
	342	
BARGES	348	This is the first such commercial operation in polar regions. At far-flung islands of activity, technicians are still learning the skills of Arctic engineering.
	349	
BRIDGE	349	During the frigid winter, when temperatures may plunge to minus 60 degrees Fahrenheit, continued contact with all personnel on the "Slope" can be a matter of life and death.
	358	
DERRICK	369	But even in summer such communications are essential to coordinate the work.
	371	
BP CENTER	372	All construction must be adapted to the special requirements of the Alaskan environment.
	375	The Operations Center itself is streamlined for winds which may gust up to 100 miles per hour.

377

The structure is mounted on massive steel pilings which avoid heat transfer to the frozen earth, and lift the building clear of drifting winter snows.

383

SNOWS TUNDRA

386

Carpeting Alaska's North Slope is a thin mat of vegetation - the arctic tundra - a very special environment.

390

SCIENTISTS ON TUNDRA

392

Studies of the tundra have gained a new importance as modern man invades the North. Oil exploration opened up vast areas of Alaska that were considered virtually inaccessible. This invasion of technology also encouraged a new generation of scientists to probe and measure and prod the spongy surface, collecting data on how this unique ecosystem works.

407

SCIENTISTS DIGGING

410

413

Research has revealed the extreme delicacy of the tundra and the care it demands.

417

Not all the work can be done on location, so samples must be carefully collected for detailed laboratory examination.

422

SNOWS TUNDRA

423

ICE

435

Only the top layer - 6 to 18 inches thick - ever thaws. Just below the surface - icy permafrost - permanently frozen earth. In the far North, the rock-solid permafrost extends to a depth of 2,000 feet!

DWARF TREES

437

Because of low temperatures, fierce winds and the short growing season, unusual trees abound - dwarf elms 40 years old but only

447

TUNDRA VEHICLES 451

468

TRAFFIC ON ROADS 469

472

GRAVEL PADS 473

479

POND BESIDE ROAD 480

482

CARIBOU 483

497

NAVAL ARCTIC RESEARCH 500

LABORATORY 502

4 inches tall, dwarf birch, dogwood and willow.

Ecology studies have helped the oil industry develop innovations which minimize disturbance to the tundra. These vehicles are used for oil exploration work and to collect construction debris - which must be picked up, or contractors won't be paid. But even the use of these vehicles is restricted during summer months, when the delicate surface is most easily scarred.

Ordinary roadbeds built on the tundra would slowly melt the permafrost and sink into it.

Therefore, roads were built on insulating gravel pads - laid like strips of carpet 5 feet thick to protect the permafrost.

In summer travel would be virtually impossible without such roads.

For caribou, the roads and gravel pads have become a refuge from summer swarms of mosquitoes. In Alaska, caribou outnumber people two to one, and conservationists were concerned about their welfare. But hunting is now forbidden on the North Slope, and studies indicate that the caribou seem undisturbed by human activities.

A relatively limited number of species inhabits the Polar World.

RAVENS

504

Wildlife which might be disrupted by the invasion of man must be understood to be protected.

SNOWY OWL

510

The animal compound at the Naval Arctic Research Laboratory provides a unique collection of regional creatures for study.

GIRL IN LAB

523

Today, the oil companies themselves support a wide range of research - and enlist the aid of some of the world's foremost experts in the ecology of the North.

GAVIN IN LAB

529

Angus Gavin came out of retirement to continue his ecological research for Atlantic Richfield. He advises the oil companies on measures needed to protect the Arctic environment.

BROOKS MTS

548

His studies cover a broad range of Arctic creatures - from the tiny fairy shrimp of tundra ponds - to bigger game.

HELICOPTER

551

His wildlife surveys range across the thousands of square miles of the North Slope.

HELICOPTER AERIALS:

554

Angus Gavin keeps a careful and continuous record of the abundance of wildlife species - to see if their numbers and living patterns are affected by the arrival of technology.

TUNDRA, SWANS, GRIZZLY

MOOSE, CARIBOU

560

GAVIN VO FROM TAPE:

Moving over unto transect seven which takes...

NARRATOR VO:

In regular flights over the Slope, he tape-records his observations.

GAVIN VO:

...coming over the tundra we see that the ponds are now beginning to shallow up. Very little flowers left...

NARRATOR VO:

In the development of any area, Angus Gavin feels, it is impossible not to cause some environmental or ecological change.

GAVIN VO:

... Say, there's a grizzly bear. Isn't it a beauty. Let's go down and have a look at him. He's got a blotch, he's big male...

NARRATOR VO:

So far, ecological surveys show little or no change in animal populations.

GAVIN VO:

... there's some swan. One of them can't fly very well yet, the others...

NARRATOR VO:

Swans and geese nest near airstrips and roads. Some species of birds are actually increasing.

GAVIN VO:

... there's a nice moose. Beautiful moose, isn't he? He's got a nice head on him.

Yes, he's a beauty.

Gosh, he doesn't seem a bit scared of you, does he? He's standing right there as though we were just another bird flying by....

NARRATOR VO:

Angus Gavin reports that:

As the area is developed, some local change may possibly occur, but if care continues to be exercised, change should be minimal and have little or no effect on the overall wildlife picture on the North Slope.

GAVIN VO:

... let's go over to transect ten again. Pick up that on the map...

NARRATOR:

Encouraged by the long days of summer sun, the tundra in bloom sparkles with beauty. Alaska is usually thought to be a vast and frozen wilderness.

It's understandable that Eskimos are offended when their Arctic land is described as hostile and desolate. They find their environment neither cruel nor kind. It is simply there - basically indifferent to man. Today, they may go fishing in an aluminum boat, but they continue to rely on their environment to supply them with their basic needs.

Paradoxically, new opportunities to live the traditional life are indirectly due to the development boom. In the midst of the pipeline controversy, the Eskimos demanded the return of their native lands.

The settlement they received - 40 million acres - with mineral rights - gave many a choice they never had before: to live the old way - or the new.

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AERIAL: CARIBOU DRINKING 617

TUNDRA FLOWERS 620

FAMILY FISHING 636

648

651

TENTS 655

SOD HOME 667

SEALSKIN BOAT

682

TENTBOAT ON RIVER 683

One group of Eskimos chose to combine the best of old and new. They decided to return to a remote and ancient campsite on the Colville River - where they would build a modern village.

OLD VILLAGE TENTS

High on a bluff above the river, they survived the long arctic winter in a ragged tent encampment, through temperatures of 50 degrees below zero with 75 mile per-hour winds. Though they could have waited until spring, they were determined to lose no time resuming their familiar Eskimo pattern of life, but in a unique new way.

NEW VILLAGE 705

Today, on the tundra far above the Arctic Circle, stands the village of Nuiqsut: 39 modern houses, a school and a post office.

713

CHILDREN RUN AND LEAP

A peaceful Eskimo suburb, almost 200 miles from the nearest city, Nuiqsut is a good place for children to grow up.

724

CHILDREN SWIM 739

Eskimo parents do not want their children to grow up to become what they call "imitation white men". Like people everywhere, they are proud of their way of life, and hope that their children will remain "good Eskimos" even in a modern world.

750

THOMAS NAPAGEAK AND WIFE AT HOME 754

Thomas Napageak is the president of the Nuiqsut village corporation. He and wife Frances may still lead the life of traditional Eskimos, but as a corporation executive he has taken on the responsibility of making the village a success.

764

GRANDMOTHER SEWING 767

The Eskimos wanted a village secure from the pressures of a crowded city, but in contact with the modern world.

PLANE LANDS AT NUIQSUT AIRSTRIP AIRSTRIP 777

Weather permitting, there is regular air service to Nuiqsut.

ARRIVALS 780

An arriving plane may bring outboard motors, aluminum boats or rifles for hunting or relatives from far away: a visiting grandmother from a fishing village, or a father returning home from a new job on the North Slope.

794

Today, some Eskimos can commute between the future and the past.

TUKLE HOUSE EXT. 801

The Tukle family enjoys the best of both worlds. Irene's husband, Ben returns regularly to Nuiqsut from his job as a driller at Prudhoe Bay.

PLANE ON AIRSTRIP 807

IRENE AT HOME INT. 808

At home, meals are still traditional - caribou for dinner. The Tukles are among the first to benefit from the special work schedules arranged with the oil companies.

825

Two weeks on the job and two weeks off, not only keeps the family together, but affords a regular opportunity to provide for the family in the Eskimo way.

WILD GEESE FLYING 832

Success in hunting is the key to survival in the Arctic, and a good hunter in the family is still a source of pride.

SEAL HUNT SEQUENCE 836

SEARCHING FOR SEAL 837

Today, an Eskimo seal hunter might also be a successful pipeline worker, a crane operator or a corporation executive in the other half of his life.

844

SEAL BROUGHT ON BOARD 854

Most Eskimos feel, as they have always felt, that "the white man's way is not the only way to go" and now they have a new freedom of choice.

859

WATER 869

Nuiqsut itself represents the essence of this new freedom. It affords a new way to combine the benefits of today and the satisfactions of traditional life.

875

RAINBOW: TENT VILLAGE 876

For the Nuiqsut Eskimos, returning to their homeland and braving the first winter was the beginning of a dream -- and now, as their share of the oil boom, that dream seems to be coming true.

RAINBOW: NEW VILLAGE

NEW VILLAGE DUSK

The Eskimo's determined demands -- and the response to them -- reflects a new, world-wide awareness that the quality of life is precious. And that saving our environment must be part of human progress.

OIL RIGS 910

In the controversy over the oil pipeline, native Alaskans, conservationists and the general public posed the challenge. Eventually, the giant corporations came up with a positive response. For the first time, a major development project is proceeding with a new concern for environmental and human consequences.

TUNDRA AND PONDS

912

From the United Nations Declaration on
the Human Environment:

Man is both creature and moulder of his
environment.

Economic and social development is essential
for creating conditions on earth, necessary
for the improvement of the quality of life.

A point has been reached in history when
we must shape our actions throughout the
world with a more prudent care for their
environmental consequences.

DRILLING RIG

930

SUPER END CREDITS