Trapping and Welfare

The Economics of Trapping in a Northern Saskatchewan Chipewyan Village

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RÉSUMÉ

Cet article étudie l'économie de la trappe telle que pratiquée par une importante communauté de Chipewya au nord de la Saskatchewan. Deux modes différents de pratiquer la trappe se sont développés dans cette communauté. Aucun de ces deux modes n'apporte un profit significatif immédiat au trappeur. Beaucoup de trappeurs continuent à trapper même s'ils y perdent de l'argent continuellement. Il est clair que la trappe doit être considérée comme une expression des valeurs morales et politiques plutôt que comme une activité économique.

ECOLOGICAL ZONES

The area exploited by the Mission Chipewyan[1] includes three distinct ecological zones. The southern third of their area is boreal forest. The northern two-thirds includes the open transition zone of the boreal forest, the tundra, and its fringes. While the tundra proper is only marginally exploited now, the tundra fringes (tree line) are still moderately exploited.

The boreal forest extends south from the village of Mission. It is characterized by extensive areas of moss-covered sand and relatively few lakes. The country is rolling with few areas of

[1] Mission is a pseudonym, as are all names of persons. The fieldwork on which this article is based was conducted in 1969-70 and 1971-72 and was supported in part by NIMH fellowship and field research grant 1 FO 1 MH 43470-01A1 and the Graduate School of Duke University.

rough terrain when compared to the northern part of the range of the Mission Chipewyan.

Travel is not difficult within this zone and it is rich in fur-bearing animals and game. Although there is no significant number of woodland caribou in the region, the abundance of moose and spruce grouse assures a competent hunter an adequate food supply.

The boreal forest now has few wolves[2] — due to poisoning by the D.N.S. — and there is no trappable population of white fox. Other fur-bearing animals are plentiful with mink, marten and beaver being the most frequently taken. Fish are plentiful but are smaller in size than in the other zones.

The transition zone of the boreal forest begins on the north shore of the lake of Mission. The differences between the forest around Mission and the north end of the lake are quite noticeable even to a casual observer. The land is far rougher. Jagged hills and long deep valleys are prominent.

The soil is sand, but the sandy areas are much less extensive than to the south. Bare rock is everywhere. Lakes are more common, constituting up to fifty per cent of the surface area. The entire zone is contoured northeast to southwest, and in fact, the Chipewyan world axis orients northeast to southwest instead of north to south.

The further northeast one ventures into the transition zone, the more open it becomes. This reflects the increasing severity

[2] Wolves are scarce in Saskatchewan due to D.N.S. poisoning. They are relatively common in the Northwest Territories in spite of the extensive poisoning of a white trapper. Estimates by his employees of his kill are in the vicinity of 300 to 350 wolves killed each year. Of these, 80 to 150 are recovered. Many of the baits, especially the unmarked ones set on land, are not recovered. This poisoning is having its effect on the caribou through the removal of predation. In 1970, I examined forty-eight caribou taken by one group in the Northwest Territories. Of the forty-eight, I found fourteen injured or diseased — one broken leg, one throat cancer, four serious infections of lung flukes, one crippling hoof infection and seven seriously parasite-damaged livers. I am not trained as a pathologist and based the judgment of the livers only by comparison with the sixty or so that I saw.

On a small lake in the Northwest Territories I found the hide of a wolf, a bear, and a wolverine, as well as remnants of something my guide could not identify — a loss of about $220.

of climate, the presence of permafrost, and the lack of soil. The animal and bird life reflects the changes in the forest.

Although all the major animals and birds of the boreal forest — except the fisher — are found within the transition zone, most of them are at or near the northeast limit of their range. They are found in lesser numbers within this zone the further to the northeast one progresses. Almost as if in compensation, within this zone individual trees are larger, forest fires less frequent, and barren ground caribou normally winter here.

Within 140 miles of the village of Mission the transition between forest and tundra begins. This narrow zone is in many ways richer than either of the other two. The number and type of fur-bearing animals is markedly reduced. Beaver, lynx, and fisher are not present; mink and marten are scarce. But wolf, wolverine, and fox are more plentiful and white fox can be taken about four years of every seven. Caribou are much more plentiful than elsewhere within the range of the Mission Chipewyan. Most years they can be found from the end of July until the middle of the following June.

With the decrease in number and type of fur-bearing animal in the progression from south to north-northeast, there is a corresponding change in the primary food source for the Chipewyan. In the southern part of their range there is almost the certainty of a continuous food supply. Moose, spruce grouse, porcupine, bear and rabbit (snowshoe hare) are always present even though their populations are subject to considerable variation in numbers.

The further north one ventures, the less reliable the food supply becomes. Fifty miles to the northeast of Mission, moose, rabbit, and porcupine are scarce. One hundred miles northeast, where most of the northern trappers have their base camps, moose, porcupine, and spruce grouse are rare and rabbits are scarce. At tree line, moose, rabbits, porcupine, and spruce grouse are either extremely rare or absent.

However, it is only in the two northern zones that there is now any chance of finding caribou in any numbers. Caribou were, and still are, the conceptual centre of the Chipewyan universe, as well as their primary food source. But caribou are migratory and vary widely in their distribution from year to year. Utilization of caribou as a primary food source is always a feast or famine situation. If the herds come, there are far more than anyone can possibly use. If the herds do not come, there are never enough stragglers around to keep the people fed.

The different ecological zones have markedly different climates, in addition to their differences in animal life. At tree line, freeze-up frequently occurs a full month before it does at Mission. And Mission is often two weeks ahead of the extreme southern parts of the Mission trappers area. Break-up occurs in June instead of May at tree line, and the mid-winter temperatures appear to be about 10°F colder (mean January temperature) at tree line. Other variations in climate, while most probably occurring, are not recorded.

THE VILLAGE AND ITS SUBDIVISIONS

The village of Mission is a large new community. It was founded in 1953 when the priest moved his church to Mission Lake in order to escape the increasing influence of the whites and Metis of Stony Rapids. The new village was successful because of the post-war collapse of the fur market and the decline of the caribou herds.

As economic conditions worsened, more and more families constructed permanent houses in the vicinity of the church in order to draw on welfare during the winter. A Hudson's Bay Co. store was established in Mission in 1959 and a school was established about the same time. By the mid-1960's all of the Indians of the band had built a house either at Mission or at Stony Rapids.

Mission now has an Indian population of approximately 540. Of these, all but three families are treaty Indians. Stony Rapids has a population of about 170 and is almost entirely white or Metis. Only a handful of the more acculturated treaty Indians live in Stony Rapids.

Since 1965 there has been a tremendous increase in government money spent at Mission. There is a multi-million dollar school and teachers' housing complex as well as some sixty frame houses built for the treaty Indians by the Canadian government.

The population of Mission comprises two major groups. The majority are Hearne's caribou-eater Chipewyan. They regard themselves as always having been in this country. This belief implies at least three generations in the region on the part of male ancestors. Three generations from adulthood is sufficient time for the actual birthplace of male ancestors to be forgotten.

During the 1920's and 1930's, a number of people moved to the Mission region from Chipewyan communities along the Churchill River in Saskatchewan and from Brochet in Manitoba. These immigrants spoke different dialects and had a different kinship system.

These immigrants have intermarried in the village and are mixed into all subgroups of the Mission community. They have retained their own kinship usage, but have been unable to transmit them to their children. Their dialect has blurred into the predominant speech patterns of the Mission community.

The Mission Chipewyan are divided into two named groups. The division now reflects the political division of the territory of the Mission Chipewyan between two Canadian political divisions, the Northwest Territories and Saskatchewan. The *Yonthehotina* trap in the Northwest Territories, and the *Thulekayaratina* trap in Saskatchewan. Although the two groups often function as opponents on political issues, they are not political groups or bands.

The named groups of Mission Chipewyan represent two distinct solutions to the problem of survival. They are (1) social adaptations to the different ecological conditions in the boreal forest and the open transition zone of the boreal forest and tundra. And (2) they reflect differential acculturation to the welfare society of the village.

The *Yonthehotina* take their families to the trapline and operate from fixed base camps in the bush for the trapping season. The *Thulekayaratina* leave their families in Mission all year round. Only the men and boys go into the bush for the trapping season.

Membership in either of these groups represents an economic specialization. There is very little movement of trappers from one zone to another. There are almost no successful transitions — lasting more than two years — between the groups except when a *Yonthehotina* trapper completely withdraws from trapping and remains in the village to subsist on welfare and odd jobs.

The differences in climate, animal life, and terrain between the zones are sufficiently great to call on different skills and techniques. One or two unsuccessful seasons in a different ecological zone are sufficient to cause a trapper to return to his own ecological zone. Most changes of zone are caused by service to the father-in-law after marriage. The traditional two-year service is not sufficient to learn the skills required in the new ecological zone. Upon completion of the traditional period of service, the trapper returns to his own zone where he is more successful at trapping and hunting.

The difference in technical skills required in each of the zones is becoming relatively less important in maintaining the distinction between the two groups. Instead, the degree of acculturation to certain aspects of Canadian society is becoming paramount. The *Thulekayaratina* spend more of their time in the village and more time seeking jobs. All of the full-time jobs are held by *Thulekayaratina*.

The primary influence for acculturation comes through women. As the *Thulekayaratina* women spend then entire year in the village they are more subject to acculturation pressures than any adult group. They, in turn, bring the pressure of their expectations upon their husbands.

The proximity of the *Thulekayaratina* traplines to the village allows the men to spend the bulk of their time in Mission. Traplines are set and the trapper returns to the village. Venturing out to check his traps not more than once every two weeks.

Closer association with the village is related to a greater degree of acculturation of *Thulekayaratina* males compared to *Yonthehotina* males. This differential acculturation is most clearly shown in the utilization of welfare and cash income by the two groups.

Welfare is the primary economic fact of life for all but one of the treaty families at Mission. The greatly increased costs of store goods and the increased economic expectations of the people have come at a time when the traditional sources of income are at their lowest value.

With the extremely low prices furs bring now, it is impossible to gain a sufficient income to feed and clothe a family. Only the large scale use of poison will produce a substantial income and that practice is so destructive that it could not be used by the Indians on a large scale. Although at least half a dozen Indian trappers have access to poison, none of them use it on a systematic basis.

The *Thulekayaratina* trappers have adjusted to village life and welfare. They use welfare as their primary livelihood and relegate trapping to a secondary level of economic importance.

For these men and their families, it is the Ration payments from Indian Affairs that provides the bulk of their livelihood. Rations are given in the form of credit at the Hudson's Bay Co. store. They are paid each month and are based on family size and need. Any cash income is charged against the amount of Ration payments for which the family is eligible.

Since the families of the *Thulekayaratina* remain at Mission they receive the full benefit of the Ration system. The trappers are considered employed. But their furs are sold every time they return from the traplines. The amount they receive is never large enough to detract from their ration payments since the smaller sales are not reported to the Indian Agent.

Bone, Shannon, and Raby (1972:156) report figures for the Mission trappers that give an average income of $206.74 for the 1969-70 trapping season. This low figure reflects three basic aspects of trapping in Saskatchewan: (1) fur prices are generally low, (2) the number of skins taken is low and (3) the furs most frequently taken in Saskatchewan are low-value furs.

However, the expenses incurred by the *Thulekayaratina* trappers are low. They do not use aircraft on their traplines.

This eliminates the cost of an aircraft charter. The cost of maintaining a dog team must be met even if a man does not trap. By using dog teams for all their trapping they incur no extra transportation expenses to trap.

The only expenses incurred are for store food (tea, sugar, flour, and lard), replacement of hardware items (traps, fishnets, etc.) and rifle shells. Most of these expenses are necessary just to hunt. The only extra cost that an active hunter incurs to trap is the cost of his traps, and traps may be used for several seasons.

The fur yield of the *Thulekayaratina* is almost entirely profit. Even the worst *Thulekayaratina* trappers who only make two, three or four skins a season, still make money if they also hunt. The *Thulekayaratina* subsist on welfare and game and use the cash proceeds of trapping for luxury items and gambling.

The extent of the dependence upon welfare is shown by the fact that a substantial number of men with families and virtually all of the unmarried men do not bother to trap at all. The cash from trapping is simply not worth the effort.

THE YONTHEHOTINA

The situation is much different for the *Yonthehotina*. Their traplines are too far from Mission for them to make frequent trips by dog team between the village and the trapline. Only three trappers leave their families in Mission and go to the traplines alone. (Two half-brothers and a widower.) All the other *Yonthehotina* take their families into the Northwest Territories with them.

This greatly increases the amount of supplies that must be purchased and taken into the bush and requires the use of a charter aircraft (Sharp:nd). The amount of store supplies taken into the bush varies greatly between families. The major factors affecting the amount of supplies taken are: (1) length of stay in the bush, and (2) the number of people in the family. The amounts presented in Figure I are based on a group of seven (two adult males, two adult females, one teenage male, and two young girls.) The length of stay in the bush was from August 11 to December 19 for five of the group, and August 1 to September 11 for the ethnographer and his wife.

The list of supplies in Figure 1 is adequate but not extravagant. The party ran out of tea, flour, lard, tobacco, .22 shells, raisins, macaroni, and candy before the December 19 return to Mission. An absolute minimum cost is in the vicinity of $200 in supplies. A plentiful supply of tea and tobacco would require twice as much as the amount on the list.

Each trapper in the family requires ten boxes of shells for his rifle. Purchasing shells for all the rifles in a group can become very expensive if a number of teenage sons have their own rifles.

The list in Figure 1 does not include the purchase of fishnets, floats, saws, axes, or any other hardware items. Normal replacement of hardware items requires $50 to $75. On occasion, a major purchase (such as dog harness or toboggan) may double the cash outlay for supplies.

FIGURE 1

OTTER FAMILY TRAPPING SUPPLIES

	Item	*Quantity*	*Approximate cost (1970)*
1.	Flour	300 lbs.	$ 55.00
2.	Sugar	150 lbs.	30.00
3.	Lard	25 lbs.	25.00
4.	Macaroni	10 lbs.	2.00
5.	Raisins	5 lbs.	3.00
6.	.303 shells	10 boxes	65.00
7.	.270 shells	10 boxes	72.00
8.	.22 shells	10 boxes	10.00
9.	Candy	1 lb.	2.00
10.	Potatoes	10 lbs.	7.00
11.	Tea	24 lbs.	24.00
12.	Tobacco	12 lbs. (24 cans)	48.00
		567 lbs.	$324.00

It was not possible to obtain accurate cost figures from a larger sample of trappers. From their conversations and complaints about high costs at the store, I estimate the range of costs to be from a minimum of $200 to a maximum of $450. The mean figure should be close to $300.

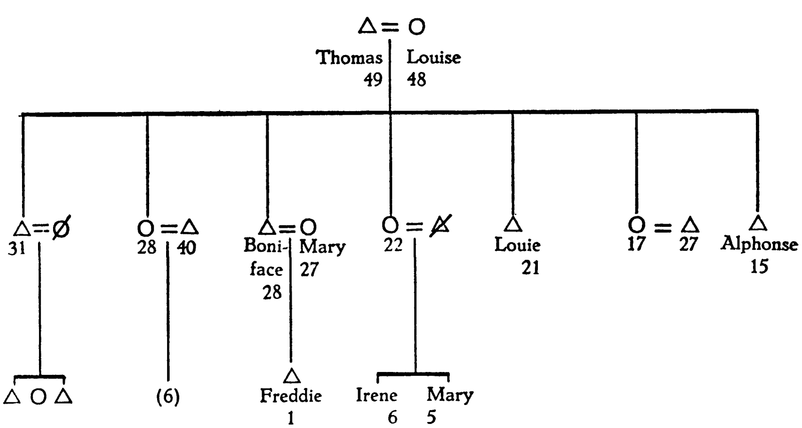
If trapping activity is resumed after Christmas, more supplies have to be purchased. Trapping is resumed only if an adequate supply of caribou have been taken by Christmas. The certainty of caribou meat makes trappers willing to return with one-quarter of the food supplies and one-half of the shells they take before Christmas.

The Otter family went 168 miles into the Northwest Territories. This was twenty-eight air miles longer than the charter to their usual camp. This location was chosen because Thomas, the father of all the males in the group excluding the ethnographer, felt that there would be large numbers of white fox in 1970. The 1970 camp was at tree line.

The entire party that went into the bush consisted of three families. All were related to Thomas (Figure 2). Boniface maintained his own tent and purchased his supplies separately from his father. He paid for the Beaver charter that brought him and all the dogs. His father paid for the Otter charter. Louie

FIGURE 2

OTTER FAMILY STRUCTURE*



* Only named persons were on the trapline

was already in the Northwest Territories with his own supplies and dogs and joined his father in late August. Thomas, Boniface, and Louie all ran independent traplines.

A more complete list of what Thomas took for the trapping season as well as what Boniface brought is presented in Figure 3. (To guard against overestimating the weights, the ethnographer's dog's weight, ninety-five lbs., is not included.)

The group loaded the entire 2,770 pounds on the Otter at Stony Rapids. The aircraft was so overweight that the floats were entirely under water and the plane could not take off. The pilot required Boniface, eleven dogs, both toboggans and dog

FIGURE 3

WEIGHTS OF TRAPPING SUPPLIES

Item		*Approximate weight*	
		Thomas	
Food, shells & tobacco		567 lbs.	
Six dogs		240 lbs.	
Seven people		810 lbs.	
Tents & bedding		50 lbs.	
Rifles, axes, etc.		50 lbs.	
Toboggan & harness		75 lbs.	
Fishnet, etc.		30 lbs.	
Other hardware		25 lbs.	
	Total	1,847 lbs.	1,847 lbs.
		Boniface	
Food, shells & tobacco		200 lbs.	
Five dogs		200 lbs.	
Three people		323 lbs.	
Tent & bedding		25 lbs.	
Rifle, axes, etc.		25 lbs.	
Toboggan & harness		75 lbs.	
Other hardware		25 lbs.	
Outboard motor & gas		50 lbs.	
	Total	923 lbs.	923 lbs.
			2,770 lbs.

harnesses to be unloaded. Boniface and the dogs followed the next day by Beaver. The toboggans and harnesses were brought later by the pilot when he was on a hunting trip.

The initial cost of the supplies and transportation for the trapping season was $1,238.80 (Fig 4). Of this amount, Thomas paid $742.00 and Boniface paid $516.80. The ethnographer paid for the aircraft and was reimbursed by Thomas and Boniface. Whatever extra Thomas purchased to allow for the ethnographer during the five weeks spent in the Northwest Territories was more than balanced by the fact that Thomas' supplies were inadequate to last until Christmas and the fact that the ethnographer consumed only flour of the items on the list. Boniface's purchases were unaffected by the ethnographer's presence.

At Christmas, 1970, Louie returned to Mission by dog and sent aircraft north for his father and brother. Each chartered a Beaver to return to Black Lake. This added $268.80 to each of their costs for the 1970 trapping season, giving a total of $1,010.80 for Thomas and $785.60 for Boniface.

The largest group of *Yonthehotina* (two-thirds of the northern trappers; roughly 110 of their 178 dependents) have their camps on Selwyn Lake. This lake is only a $95.00 to $100.00 charter by Cessna 185 or $160.00 by Beaver. Although other expenses are the same, this allows a saving of $217.60 on Beaver charters. Selwyn Lake is within reach of Mission by dog team and a fair number of trappers make their initial entry into the bush by Cessna 185. This aircraft, on floats and with ¾ fuel, has a payload of 960 pounds.

FIGURE 4

COST OF SUPPLIES AND TRANSPORTATION

Otter Charter, round trip		
(168 miles each way @ $1.25 per mile)		$ 418.00
Beaver Charter, round trip		
(168 miles each way @ $.80 per mile)		268.00
Supplies, Thomas		324.00
Supplies, Boniface (estimate)		248.00
	Total Cost	$1,238.80

Nine hundred and sixty pounds is not an adequate amount for a full trapping season. The problem of insufficient supplies at the time of initial entry is countered by making dog team trips to Mission for supplies after freeze-up.

The total cost for a season's trapping at Selwyn Lake is considerably less than for a season further north out of reach of Mission by dog team. (See Figure 5).

If a Cessna 185 is used, the cost for a season of trapping at Selwyn Lake can be reduced to $500.00 or about half the cost to Thomas for the 1970 trapping season and the 5/7ths of the cost to Boniface for the same period. (See Figure 6.)

To get an absolute minimum figure for the cost of a trapping season on Selwyn Lake, we may use the minimum figure of

FIGURE 5

COSTS OF TRAPPING AT SELWYN LAKE

Item			*Cost*
Beaver Charter (Initial) Selwyn Lake			$160.00
Beaver Charter (Christmas) Selwyn Lake			160.00
Supplies			300.00
		Total	$620.00
Useful load	Cessna 185		1700 lbs.
Minus	Pilot's weight		— 170 lbs.
Minus	¾ Fuel (45 gals @ 6 lbs./gal.)		— 270 lbs.
		Payload	960 lbs.

FIGURE 6

SELWYN LAKE WITH 185 CHARTER

Item		*Cost*
Cessna 185 charter to Selwyn Lake (Initial)		$100.00
Supplies		300.00
Cessna 185 charter to Selwyn Lake (Christmas)		100.00
	Total	$500.00

$200.00 for supplies instead of the more reasonable figure of $300.00. This gives a cost of $400.00 for a season's trapping.

Having examined the costs involved in a season's trapping in the Northwest Territories, the question naturally arises as to the yield from a season's trapping.

It was not possible to get an entirely accurate measure of the yield of Thomas and Boniface for the 1970 trapping season. Both returned to Mission December 19, 1970, and sold their furs upon their arrival. The ethnographer did not return to Mission until December 23, 1970.

From talking to them and their families, it was found that Thomas made between $180.00 and $200.00 and Boniface made $240.00. This left Thomas with a net loss of $810.00 and Boniface with a net loss of $545.60. The yield for a season's trapping was less than the cost of their charter air fare from the bush camp to Mission.

Bone, Shannon & Raby (1972:156) gathered statistics on the fur yield from D.N.R. for Saskatchewan and the R.C.M.P. for the Northwest Territories. They found the following yield per trapper for 1969-70:

Saskatchewan	N-24	$222.08
Saskatchewan	N-80	$177.80
Northwest Territories		$533.85

The figures for the Northwest Territories include the kill of a white wolf poisoner, which was approximately $7,500.00. This figure comes from gossip at Stony Rapids, but fits the fact that Louie quit trapping and was paid $830.00 for skinning eighty-three wolves at $10.00 each. The year 1969/70 was bad for the poisoner. He guessed the caribou would swing east and moved his operation correspondingly. He returned to his normal area and took the wolves mentioned above by Christmas. He said that his take in 1969/70 was less than half of normal when I talked to him in 1972. Obviously, the number of wolves killed, at $60.00 to $110.00 each, has a great bearing on the economic success of the season. No Chipewyan hunt wolves specifically.

The average trapper who keeps his costs to the absolute minimum has to expect an average loss during the trapping season of a minimum of $74.50. If we consider the Indians' estimate of their yield and a more reasonable cost figure ($500.00), the average trapper can expect an average loss of at least $174.50.

This loss can be much greater than the minimum figure shown in Figure 7, as is the case of Thomas and Boniface. It is impossible to conclude that trapping is, or is regarded as, a profitable economic activity.

FIGURE 7

ECONOMICS OF TRAPPING

Source	*Expected Yield $*	*Minimum $ Cost*	*Net Loss $*
Bone, Shannon & Raby	533.85	400.00	+ 133.85
Bone, Shannon & Raby, corrected for white wolf poisoner	325.50	400.00	— 74.50
Native estimate of number of pelts	250.00	400.00	— 150.00

For the *Yonthehotina* to trap, they must work at wage labour during the summer. The income saved from the summer work is the source of cash used for charter aircraft. Supplies for the bush can be obtained through an advance payment of Rations — a partial payment far less than that which would be paid if the trapper remained in Mission during the trapping season.

Not only do the *Yonthehotina* loose money by trapping, they work during the summer to save up the money they will lose trapping. Without the welfare income for supplies, trapping would be impossible for them.

CONCLUSIONS

The persistence of trapping in the economy of the Mission Chipewyan represents two distinct adaptations. For the *Thulekayaratina*, trapping is a subsidiary activity that produces a cash income only as long as it is not pursued actively. Too much success at trapping would result in a cut in Ration payments leaving the trapper with no gain for his effort.

For the *Yonthehotina* trapping is also a subsidiary interest. It is pursued not as a means of economic livelihood but as an adjunct to the hunting of caribou. Trapping is a means of minimizing the cost of pursuing a traditional way of life in the bush, removed from the white man and the pressures of Mission.

The single activity, trapping, thus functions in a dual manner for the *Yonthehotina* and the *Thulekayaratina*. For the *Thulekayaratina* trapping is a luxury producing adaptation to the white man and his welfare. For the *Yonthehotina* it is an expression of protest against the white man and his welfare; a protest that uses the white man's welfare and jobs to continue a traditional way of life.

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