### Tundra memories Arctic Survival

The following is reprinted from November 19, 1962 issue of Tundra Times:

#### Arctic Survival By Howard Rock

#### Times Editor

For great many years there has been an erroneous image in connection with the snow igloo in Alaska. It persists because educators have not bothered to correct certain textbooks used in school in the United States.

It is disconcerting, to say the least, for an Eskimo pupil in Alaska to read in his textbook that he lives in snow igloos. The Eskimo student has never seen a snow igloo. It is also likely that his parents or grandparents have never seen a snow igloo unless they have traveled east to Canada. It is no wonder that tourists from the lower states are often disappointed in finding out that the Eskimos in Alaska have never lived in snow igloos. The common remark has been, "But I read in my geography book that you live in snow igloos."

#### No Snow Igloos

Although Alaskan Eskimos have never lived in snow igloos, there are other Eskimos who do. These are Canadian Eskimos. They are nomadic and out of necessity use snow igloos. Their economy depends on moving with the animals they hunt for subsistence. They use the snow igloo as a temporary dwelling.

When a hunter or traveler in Alaska is caught in a storm or (Continued on Page Three)

# 'The only igloos he saw were in Florida'

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cannot make the distance home, he makes temporary shelter for the night. Not knowing how to make a snow igloo like his Canadian cousin, he digs into a bank of snow.

Some Alaskan Eskimos who are close to the Canadian border do know how to build snow igloos because they have learned the art of making them from Canadian Eskimos.

#### Florida Igloo

When Paul Tiulana of King Island was asked by a tourist if he had ever seen a snow igloo, he replied, "Only once."

"Where was that?" the tourist asked.

"In Florida," was Tiulana's reply.

He had seen the igloo while on a tourist promotional tour in one of the warmest of the states.

The sod igloo is, and was, a permanent type home in Alaska: permanent homes and villages were a necessity. Villages were picked because of their ient driftwood pieces have been strategic economic value.

There was no need to be nomadic. Animals were plentiful site. and nature provided a succession of animals, that is, when the specie left a different specie migrated to take its place and in turn was hunted.

To take advantage of these excellent hunting conditions the faces south. ancient Eskimo in Alaska devised a home that was ideal for the climate of the Arctic-the three foot square skylight. A sod igloo.

This is how he builds it.

Long before the igloo is to be built, usually in late spring, the family who wishes to build, cuts

5 or 6 inches thick. As the squares may be done a year earlier from the time the igloo is to be built.

The reason: dry sod is necessary for a warm igloo. When sod is put on wet and fresh off the ground, it freezes when cold weather comes and the igloo is cold and hard to heat.

#### **Building Igloo**

But even when it is applied fresh off the ground, in time it dries out thoroughly from the internal heat of the igloo and by the sun and wind on the exterior.

It then becomes a perfect conductor of heat and cold. A dry and seasoned sod igloo is easy to heat and slow to cool.

After the sod pieces have been cut out and set to dry the flooring and frame of the igloo is begun.

The man of the house takes driftwood that has been washed ashore, smoothes the sides flat with his jade adze. After sufficprepared, the Eskimo is ready to erect the igloo on his chosen

He digs into the ground a desired foundation about 2 feet deep. He then lays the flooring upon which he builds the frame of the igloo.

The igloo, in almost all cases,

The roof is built somewhat of a dome shape with about a small ventilator on the roof is built in.

When the frame of the main room and the frame of the long hallway or tunnel has been sod in one-foot squares about built, it is ready for sod cover-

ing. All around the base, sod is applied two feet thick about three quarters of the way up the walls. This is to prevent the sod from falling off the walls and to provide added warmth to the igloo. The rest of the wall is covered with a foot thicknesses of sod.

#### Sod Slabs

The sod squares are applied in bricklaying fashion so the sod will adhere more solidly to the walls.

When the sod has been applied flush with the walls, a different operation is begun to cover the roof.

Sod slabs with fine grass surfaces and strongly interwoven with fine grass roots, and which are hard to tear, are used to cover the roof.

These slabs are roughly two and a half feet in diameter and about 3 inches thick. They are cut with a hoe-like tool that slices into the grassy surface. The blade of this tool is made out of a whale rib that flares out at the blade end, tapered flat and sharpened.

The sod slabs are put on the roof with the grassy side next

to the wood. This is done until the whole roof is covered.

For the final operation the same sod slabs are applied with the grassy side to the weather. Care is taken that cracks or seams are overlapped so rain and snow will not leak through the roof.

The ancient igloos usually had long, low hallways to warm the frigid air somewhat before it \* done. entered the igloo.

#### Long Hallways

The ancient igloo had a novel entrance which is no longer used today.

It was a round hole, or trap entrance, to the front edge of the room. The hallway or tunnel dipped rather sharply to this entrance to allow room for persons entering.

The reason for this type of entrance was, again, to warm the air. Frigid air, being heavier than warm air, tends to stay, more or less, immobile and only limited cold air enters the room.

The evidence of this principle can be seen in very cold weather. Steam forms at a trap entrance where warm air comes in contact with cold air. Cold air does not

rush in to cool the igloo. When desired the entrance was covered to give added warmth.

The long hallway of the ancient igloo had small chambers or rooms, two usually, on each side. One was for storage of meat for immediate use and the other was the kitchen. Here, the woman of the house cooked the meals for her family and brought the meals into the house when

The cooking chamber had simply a small hole in the roof for smoke to escape from an open fire over which the woman of the house cooked.

Prior to the whaling culture that started some 2,000 or 2,500 years ago, driftwood was apparently used for hallway frames. Later, whale ribs, jawbones, and shoulder blades were used for hallways. Apparently, this was done to conserve wood which has always been scarce on the Arctic coast.

There were two entrances into the hallway of the ancient sod igloo: one, at the front end on the graound level, usually a small door; the other, on the roof of the outer end of the hallway.

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This roof entrance was about two and a half feet square to which led a short ladder for means of entering and leaving.

This entrance was necessitated by heavy blizzards that would sometimes bury the ground level entrance.

#### The Kalagee

There was another type of igloo the ancient Eskimo did not do without. He needed it for social affairs. This was a kalagee or recreation hall. The kalagee was a huge igloo. It accommodated many people.

It was used for Eskimo dancing, games, feasts, performances of medicine men, and for story telling sessions.

A kalagee was built about the same way the resident igloo was built but many times larger. Stationary benches were built all around the floor surface. Sometimes another bench above the other was built to accommodate more people.

For heating and lighting of the kalagee, as well as the ordinary igloo, whale oil lamps were used. In the case of the kalagee several of them were required, placed at regular intervals.

Although few sod igloos are still in use in Alaska, they are slowly disappearing.

In places where few igloos are still in use Eskimos are stubbornly trying to keep them in existence under pressure of civilization. Sod igloos have been under subtle but relentless attack. One way this was done was by instructors in schools who expounded the superiority of the frame igloo.

#### Subtle Attack

It has been the experience of this writer, while attending school, that he was made to feel ashamed of the sod igloo without really knowing how it happened.

A conscientious construction engineer once expressed his feelings while building frame dwellings for Eskimo families who had been persuaded to vacate their sod igloos. He said he had been told to move the Eskimos from their warm and snug but crowded houses to larger, roomier but colder ones, where they would probably catch colds and other diseases.

The sod igloo, while it may not have been an eye-catching structure, served its purpose extremely well in the survival of the Eskimo in the Arctic. It was easy to heat where fuel was scarce. It stood up extremely well under the rigors of the Arctic climate and was comfortable. It was carefully thought out and built accordingly. Once finished the sod igloo lasted for many, many years.