

CHAPTER 12

THE POLAR REGIONS OF ASIA

In this chapter we are going to read about a region which is entirely different from any place we have so far seen. This region has continuous nights for many months and continuous days for many months. There is no daily sunrise and sunset like we have in our country. Can you imagine such a place? This region is very cold. So cold that only ice and snow can be seen - ice on the land, ice on the streams, ice on the rivers and even the whole sea is frozen.

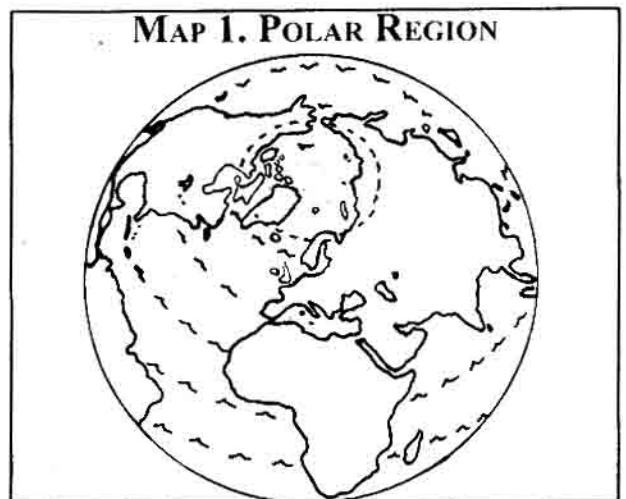
Look carefully at the pictures given in this chapter. What can you learn about the polar region?



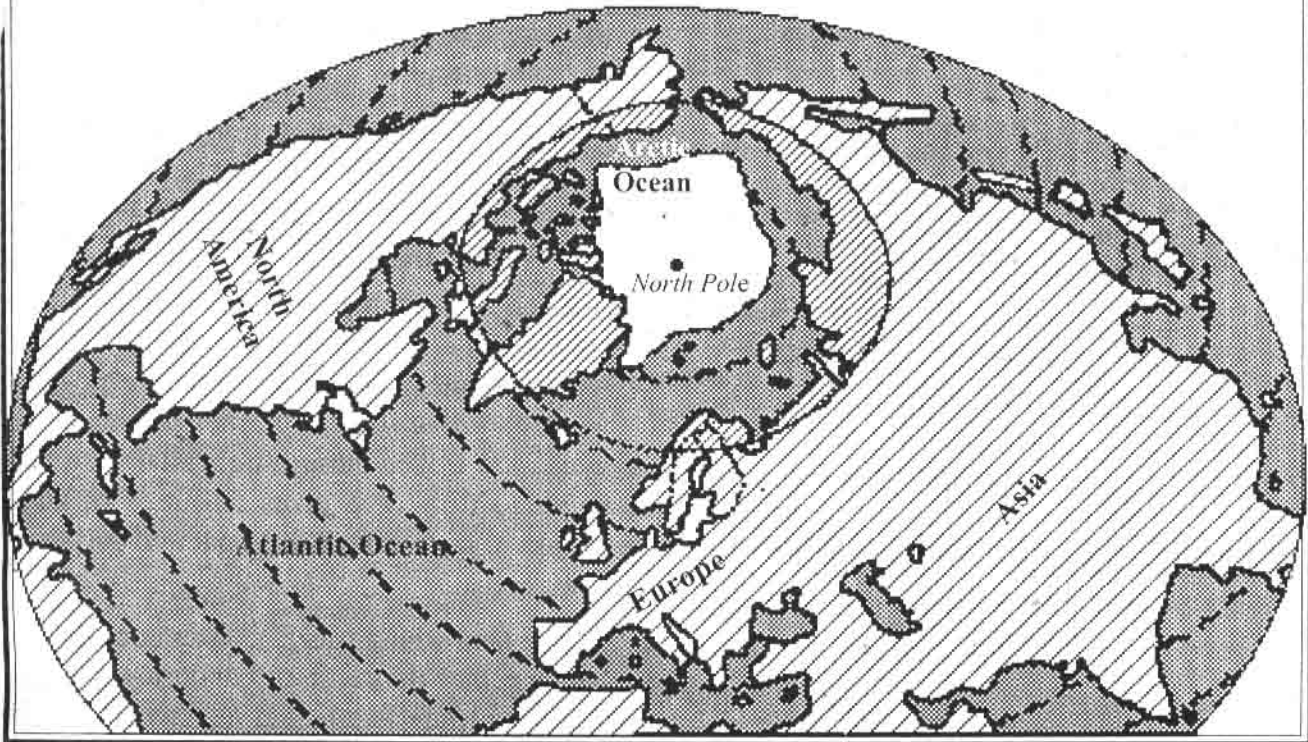
WHERE IS THE POLAR REGION?

You have seen the North Pole and South Pole on the globe. The region which lies near the poles is called the 'Polar Region'. You are going to read about the northern Polar Region in this chapter.

Look at Map 1. It shows the North Pole and its surrounding regions. The entire Polar Region has been shaded lightly. Notice how the boundary of this region has been drawn. This is known as the 'Arctic Circle'.



MAP 2. THE POLAR REGION - A CLOSER VIEW



- *Parts of which continents fall within this region?*

The northern parts of the continents within the Polar region are known as the Tundra. It is not a separate country, but is made up of parts of many different countries. Here, there is no vegetation like we have in our country. There is a unique type of vegetation known as the 'Tundra Vegetation'. The name Tundra region is derived from the name of this vegetation. This region is shaded black in Map 3.

- *Which country is this a part of?*

Locate India, Indonesia and Japan in the map and see that the Tundra lies in the northern-most region, away from the Equator, close to the pole.

- *Try to recall what happens as we move away from the Equator.*

SEASONS IN THE TUNDRA

The most important fact about the Tundra region is the extreme cold. It is difficult to even imagine how cold it is in the Tundra. It is so

cold that water is frozen for many months. For 3 to 4 months it is slightly warmer, and the ice melts.

Winter

Since the Tundra region gets very little sunlight, it is very cold. The sun does not rise for two or three months of the year. In our

MAP 3. ASIAN TUNDRA

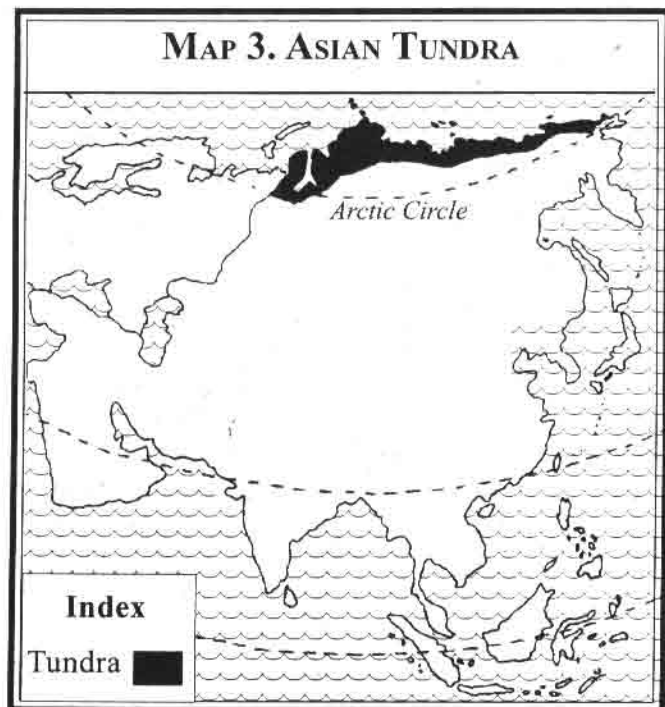




Fig. 2. Ship surrounded by ice. The ice has begun to melt and break off

country, the sun rises and sets everyday. But this does not happen in the Tundra. It is almost dark throughout November, December and January, since the sun does not rise at all. This is the winter of the Tundra, and it is bitterly cold for many months. You know that when it is extremely cold, water freezes to become ice. The Tundra region becomes severely cold - colder than the temperature below which water turns to ice. In this extreme cold, the water of the rivers, lakes and seas freezes. Strong, cold winds blow and there is snowfall.

Due to the severe cold, dark and icy conditions, all the plants die. Even birds and animals leave this region and migrate elsewhere. The whole region becomes dark, deserted and desolate.

Summer

The sun begins to shine in the Tundra around February-March. In the beginning, the sun shines for a maximum of an hour and a half and then sets. Gradually, the day lengthens - 2 hours, 6 hours, 8 hours, 16 hours, 20 hours and finally 24 hours! Yes! Then for almost three months from May to July, the sun never sets - it shines for 24 hours. But the sun does not rise overhead, but just goes around the

horizon. It does not climb up or go down but hovers a little above the horizon. (The horizon is the place where the earth appears to meet the sky). Since the sun does not go high up in the sky, it is never very warm.

Continuous days and continuous nights are a unique feature of the polar regions. In fact, there is a six-month long day and a six-month long night at the poles!

Even in the three months of summer, it is cold. But it is comparatively less cold than the winter months. Due to the relatively warm weather, some of the ice melts. The rivers which are frozen during the winter melt and begin to flow. The lakes fill up, and huge chunks of ice break off and float into the ocean as icebergs.

The land which was frozen and desolate in winter comes alive with colour during summer. When summer approaches, many multi-coloured plants, lichen, grass, shrubs and berries sprout all around. They bear flowers and fruits of different colours. Many birds and animals come to feed on them.

Vegetation

- *Two pictures are given on the next page. One picture shows winter and the other shows summer. Which picture shows summer, and which one shows winter? Look carefully at the pictures. Can you see any tree? Is there dense vegetation in this region?*

Due to the cold, the soil under the upper

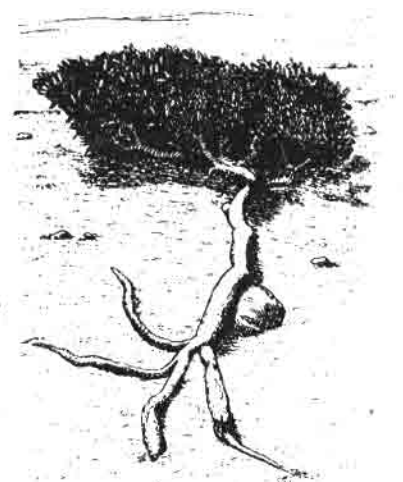


Fig. 3. The state of trees in the Tundra! These 'trees' grow out of cracks in the rocks and creep along the earth.



Fig. 4 & 5. Which among these is of summer and which of winter?

surface of the Tundra region is frozen into a rock-like state all through the year. This is called 'permafrost' Wherever there is a little soil, some small plants can grow. The underground soil being hard, it is difficult for trees to grow. Even if they do manage to grow, the trees get damaged and uprooted with the strong winds and storms. So most of the Tundra region is treeless.

• *Mention five points about the summer in Tundra.*

• *Fill in the blanks -*

The sun does not appear in the Tundra region during the months of _____ and _____.

At this time, the water _____ and the plants _____.

• *How would the people of the Tundra get light in winter?*

Dependence on Animals

You may think that human beings can't live in such a place. But surprisingly, people live here too. The people of this region of Asia are the Yakuts, Chukchis and the Semiyads. Of course, their population is very small, and most of the Tundra region is uninhabited.

How would the people here be living? What would they be eating and drinking? It is impossible to raise any crop in such a cold and ice-bound place. Very few plants and trees grow here, and those that do grow, survive for only two or three months.

In India, we are more dependent on trees and plants than on animals. We obtain our main food requirements from plants. We collect

firewood for fuel. We use wood to build houses. It is totally different in the Tundra, where people are very dependent on animals.

THE LIFE OF THE CHUKCHIS

Let us get to know more about the lives of the Chukchis who live in the Tundra region. On the north-east tip of Russia, at the edge of the Arctic Ocean, there are some small settlements. These are the settlements of the Chukchi people. Their main occupation is hunting. There is no cultivation around here.

The Summer Days

The Chukchis are very fond of the summer days. The whole settlement gets up very early in the morning. All around, there is light, and the white sheet of ice is replaced with colourful plants. One can hear the chirping of different kinds of birds. It is easy to hunt the animals which come to graze. The ice melts in the sea, and huge sea animals begin to move about in large groups. It is a happy time for hunters!

The roar of giant sea animals like the walrus can be heard across the melting seas. Herds of walruses move around together in the sea. Other sea creatures like seals, whales and fish are also found in plenty.

Fig. 6. Chukchi Settlement



The Chukchis hunt these animals and they are the basis of their lives. The hunters intently await the roar of walrus. Whoever happens to hear the sound first, alerts the others. They run towards their boats with their guns and harpoons. In the old days, people used to hunt with bows and arrows. Boats used to be made by wrapping walrus skin around a frame made of bones. The sail was made of animal skin. These boats are known as 'Bidarka'. Nowadays, the Chukchis, have motor boats which are sturdy and swift. In these, they can stalk their prey with greater speed and carry back more animals. In a bidarka, however, only one or two walrus could be carried.

After killing the walrus or seal with a gun, the hunter throws a harpoon at it. The harpoon is made of long animal bones. On one end it has a hook of bone, and the other end is tied to a long rope. The rope is also made of animal skin. The hook of the harpoon gets embedded in the body, which is then pulled into the boat. The harpoon is an essential weapon for hunting in the sea. Sometimes, huge whales and dangerous fish are also encountered while hunting in the sea.

Fig. 8. Skinning a walrus



Fig. 7. Walrus: It has tusks like an elephant, and whiskers. A male walrus can weigh more than 1000 kg. Despite its bulk, this animal is a swift swimmer. It filters mud through its whiskers while eating fish. The walrus lives in big herds.

The Chukchis remove the skin of the dead animal at the sea shore (fig. 8). They use the skin to make clothes, bedding, tents, boats and sledges. The fat from seal meat is burnt in lamps to provide light. They do the maximum hunting during the summer and store frozen meat for winter. Frozen meat does not spoil for long periods.

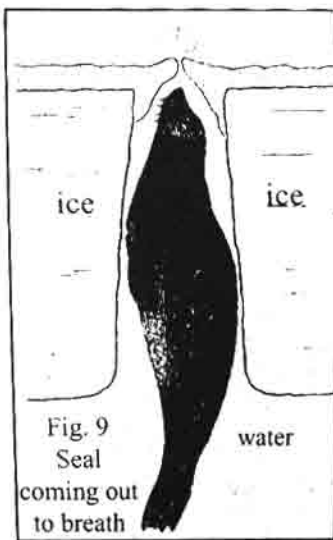
The Winter Days

As the sun disappears, the cold increases. The sea water begins to freeze. The water in the rivers and lakes turns to ice. Cold, snowy winds begin to blow. Occasionally, there are snow storms and the land, rocks, tents, boats and vehicles are all covered with snow (fig. 10). The plants which had grown in summer, get buried under the snow.

People burn seal fat inside their tents and sit around it. It is dangerous even to venture outside. Out in the open, the heavy snow storms and strong winds can sweep one away, and one can get buried under the snow. Many people die in these heavy snow storms. During a snow storm, hardly anything can be seen because of the snow fall. People lose their way, and may even fall off a cliff and die (fig. 11).

It is almost impossible to go out to hunt on such days. There are also no walrus in the icy sea. Of course, if there is no storm, and there is enough moonlight, people go out to hunt animals like the seal, fox and bear.

The seal lives in the sea. But the upper layer of the sea is covered by a crust of ice. To take



a breath, the seal comes to the surface of the sea through the cracks in the ice. At that moment, people waiting with traps or nooses, are able to hunt them. Seal skin is very warm and soft. Seal's fat also has many uses.

On many days, however, they may get nothing. During such times, they eat frozen walrus meat, chopping off pieces with an axe.

The Chukchis lay traps by placing pieces of meat for foxes and bears. From time to time, they check whether or not any fox has been caught. The soft and furry skins of the fox and bear of the Arctic region are very valuable for trade. The Chukchi people collect these skins in winter and sell them in summer.

In summer, the weather is clear, and even ships can travel to the Tundra region. Landing by aeroplanes is also easy. So, in the summer season, there is brisk tradeing. In exchange for the skins, the Chukchis buy goods like grain, guns, tea, tobacco, knives, axes, etc.

- *Which animals are hunted in the Tundra region?*
- *In which season is the walrus hunted?*
- *What do the Chukchi people obtain from the walrus?*
- *The Chukchi people live in _____ (houses/caves/tents)*
- *To buy essential goods, they sell _____ (seals/furry skins/walrus meat)*

Animal Husbandry

Some people of the Tundra are animal herders. The reindeer is the domestic animal of the Tundra. It is an animal like the deer, with antlers. A reindeer keeper may have upto 100-150 reindeers. The reindeer is an



Fig. 10. A snow covered settlement

important resource for these people. They use the reindeer to pull sledges and its meat, too, is eaten. They make tents or boats with its skin and tools with its bones.

By now it must be clear to you that the life

Fig. 11. Snowstorm





Fig. 12. Camp of reindeer herders

of the people of the Tundra is dependent mainly on animals. They make clothes out of the furry skin of the reindeer or other animals. You can get an idea about how their clothes would be from figs. 8 & 10. Their dresses, footwear, socks and caps are all made of animal skins.

Reindeer herders do not stay at one place. They keep moving in search of fodder. They stay in the Tundra during summer when small plants grow there. The reindeer graze on these plants. In addition, reindeer keepers also hunt other animals. When the winter comes, the vegetation disappears, everything gets frozen

and darkness descends. Even animals leave this place during this time. The reindeer herders pack up their tents, and along with their animals, move towards the forests further south.

The coniferous forests south of the Tundra are also cold. But the cold is comparatively less. There is also enough light. People get firewood, fodder and animals for hunting. During the summer they return to the Tundra again. Most of the year, they keep moving from one place to another. It is for this reason that they live in tents.

We have seen that these people frequently travel from one place to another. So, how do they carry their luggage? They use a cart which can be pulled through the ice. It is made of animal bones and skins and is called a sledge. It does not have wheels, but is pulled by reindeer or dogs and moves by sliding over ice. People of this region mainly use sledges to move around.

MINES AND INDUSTRIES

Petroleum and gold have been mined in the Tundra over the past thirty years. As a consequence, many outsiders have come and settled down here. Now there are big cities also. The lives of the hunters and herders have changed drastically. They have now begun to live in permanent houses, and travel in motorised sledges. But even today, their lives are based on hunting and animal husbandry.

EXERCISES

1. How does the cycle of day and night take place in the Tundra?
2. Compare Indonesia with the Tundra and point out the difference in the daily path of the sun in the sky in these two places.
3. What is the vegetation of the Tundra? Why is it known as a place without trees?
4. Why don't the people of the Tundra practise agriculture?
5. Where do the animal herders of the Tundra go during the winter, and why? Why do they return in summer?
6. Why are sledges made without wheels?
7. You have now read about three places - Indonesia, Japan and the Tundra. Among these, which depends mainly on factories, which one depends on plants and which one depends on animals?
8. In the history lessons, you have read about people similar to those of the Tundra region.
 - a) What similarities and differences do you see between the hunter-gatherers and the people of the Tundra?
 - b) What similarities and differences do you see between the pastoral Aryans and the herders of the Tundra region?