



9 Life in the Temperate Grasslands

Just as a forest can be defined as the place where trees are the main type of vegetation, grassland can be defined as a region where grasses form the dominant type of plant life. Grasslands make up almost a quarter of the total land surface. The types of plants that grow here greatly depend on what the climate and soil are like. As climate plays an important role in the formation of grasslands, it is generally used as a basis to divide the **world's grasslands** into two broad categories: those that occur in the **temperate region** and those that occur in the **tropical regions**.

THE PRAIRIES

The temperate grasslands of North America are known as the Prairies (Fig. 9.1). It is a region of flat, gently sloping or hilly land. For the most part, prairies are treeless but, near the low lying plains, flanking river valleys, woodlands can be found. Tall grass, upto two metres high, dominates, the landscape. It is actually a “sea of grass.”

The prairies are bound by the Rocky Mountains in the West and the Great Lakes in the East. Look at the map of North America (Fig. 9.2). You can see that the prairies cover parts of United States of America and parts of Canada. In the USA, the area is drained by the tributaries of Mississippi and the Canadian prairies are drained by the tributaries of Saskatchewan Rivers.



Word Origin

The word Prairie originated from Latin word priata which means meadow.



Fig. 9.1: The Prairies



Do you know?

The grasslands of Prairies were the home of native Americans often called “Red Indians”. They were the actual habitants of the continent. The Prairies were home of other tribes also like the Apache, the Crow, the Cree and the Pawnee.



Do you know?

Chinook is a hot wind that blows in winter and therefore raises the temperature within a short time. This increase in temperature results in the melting of snow, making pasture land available for grazing of animals.



Fig. 9.2: The Prairies in North America

CLIMATE

Being located in the heart of a continent, the climate is of continental type with extreme temperatures. The summers are warm with temperatures of around 20°C , while in winter -20°C has been recorded in Winnipeg, Canada. In winters a thick blanket of snow covers this region.

The annual rainfall is moderate and is ideal for the growth of grass. Due to the absence of the north-south barrier, a local wind “Chinook” blows here.

FLORA AND FAUNA

Prairies are practically tree-less. Where water is available, trees such as willows, alders and poplars grow. Places that receive rainfall of over 50 cm, are suitable for farming as the soil is fertile. Though the major crop of this area is maize, other crops including potatoes, soybean, cotton and alfa-alfa is also grown. Areas where rainfall is very little or unreliable, grasses are short and sparse. These areas are suitable for cattle rearing. Large cattle farms called **ranches** are looked after by



Fig. 9.4: A Bison

sturdy men called cowboys (Fig. 9.3). **Bison** or the American buffalo is the most important animal of this region (Fig. 9.4). It nearly got extinct due to its indiscriminate hunting and is now a protected species. The other animals found in this region are rabbits, coyotes, gophers and Prairie dog.



Fig. 9.3: A Cowboy with his horse



Glossary

Combine: A single machine which can combine the tasks of sowing, ploughing and threshing i.e. a three-in-one.



PEOPLE

The people of this region are very hardworking. They have successfully harnessed technology to utilise their rich natural resources. Two of the most developed countries in the world - the USA and Canada are located in this region. Scientific methods of cultivation and use of tractors, harvesters and combines has made North America a surplus food producer. The Prairies are also known as the "Granaries of the world," due to the huge surplus of wheat production.

Dairy farming is another major industry. The dairy belt extends from the Great Lakes to the Atlantic Coast in the east. Dairy farming and extensive agriculture both promote setting up of food processing industries.

Large mineral deposits particularly coal and iron and a good network of roads, railways and canals in this region have made it the most industrialised region in the world.



Do you know?

Important cities in the American prairies are Chicago, Minneapolis, Indianapolis, Kansas and Denver. In the Canadian prairies the important cities are Edmonton, Saskatoon, Calgary and Winnipeg.



Do you know?

The Veld name was given by the Dutch settlers before South Africa was colonised by the British.



Let's do

Some type of grass grows on almost every surface of the earth. List names of places where you have observed grass growing, e.g., lawns, cricket field, between cracks of a side walk etc.



Let's do

Velds lie in the Southern hemisphere. When it is summers in velds, what season would it be in the prairies?

THE VELDS

The temperate grasslands of South Africa are called the **velds** (Fig. 9.5). Velds are rolling plateaus with varying heights ranging from 600 m to 1100 m. It is bound by the Drakensburg Mountains on the east. To its west lies the Kalahari desert. On the northeastern part, "high velds" are located that attain a height of more than 1600 m, in some places. Look at the map of Africa. Name the countries that are covered by the Velds. The tributaries of rivers Orange and Limpopo drain the region.



Fig. 9.5: Veld in Africa

CLIMATE

The velds have a mild climate due to the influence of the Indian Ocean. Winters are cold and dry. Temperatures vary between 5°C and 10°C and July is the coldest month. Summers are short and warm. Johannesburg records about 20°C temperature in the summer.

The velds receive rainfall mainly in the summer months from November to February. This is mainly because of the warm ocean currents that wash the shores of the velds. If the rainfall is scanty in the winter months from June till August, drought may occur.

FLORA AND FAUNA

The vegetation cover is sparse. Grasses dominate the landscape. Red grass grows in bush velds. In the high velds acacia and maroola are seen to be growing. The animals of the velds are primarily lions, leopards, cheetah and kudu (Fig. 9.6).



Fig. 9.6: A Leopard

PEOPLE

Velds are known for cattle rearing and mining. The soils are not very fertile in the velds due to the presence of discontinuous grasses exposing barren surface. However where the land is fertile crops are grown. The main crops are maize, wheat, barley, oats and potato. Cash crops like tobacco, sugarcane and cotton are also grown.

Sheep rearing is the most important occupation of the people. Sheep is bred mainly for wool and has given rise to the wool industry in the velds. Merino sheep is a popular species and their wool is very warm. Dairy farming is the next important occupation. Cattle are reared in the warmer and wetter regions and the dairy products like butter, cheese are produced for both domestic supply and also for export.

The velds have rich reserve of minerals. Iron and steel industry has developed where coal and iron are present. Gold and diamond mining are major occupations of people of this region. Johannesburg is known for being the gold capital of the world. Kimberley is famous for its diamond mines (Fig. 9.7). Mining of diamond and gold in South Africa led to the establishment of trade ties with Britain and gradually South Africa became a British Colony. This mineral rich area has a well-developed network of transport.



Fig. 9.7: Diamond Mine, Kimberley



1. Answer the following questions.

- (i) What are the Temperate Grasslands of North America called?
- (ii) What are the cattle farms in the North American Grasslands known as?
- (iii) Name the rivers that drain the Velds.
- (iv) When is the rainy season in the Velds?
- (v) What is the major occupation of the people of the South African grasslands?

2. Tick the correct answer.

- (i) River Mississippi drains
 - (a) Canada
 - (b) Africa
 - (c) USA
- (ii) Drakensberg Mountains are to the west of
 - (a) Prairies
 - (b) Velds
 - (c) Pampas
- (iii) Merino is a species of
 - (a) fish
 - (b) elephant
 - (c) sheep
- (iv) Kimberley is famous for
 - (a) diamonds
 - (b) silver
 - (c) platinum

3. Match the following.

- | | |
|--------------|--------------------|
| (i) Cowboys | (a) Iron and Steel |
| (ii) Gold | (b) Prairies |
| (iii) Kudu | (c) Hot wind |
| (iv) Chinook | (d) Velds |
| (v) Coal | (e) Johannesburg |
| | (f) Animal |

4. Give reasons.

- (i) The Prairies are known as the 'Granaries of the World'.
- (ii) Rise of wool industry in the Velds.

5. Map skills.

On an outline map of North America, mark the Rocky mountains, the Great Lakes, river Mississippi, river Saskatchewan, the cities – Chicago and Winnipeg.

6. For fun.

Make a grass whistle

You will require a blade of grass about 5 cm in length. Be sure to choose the grass blade longer than your thumb. The blade of grass should be fairly thick. Choose the grass that is broad and wide. Narrow blade is difficult to hold. Put your thumbs together as your nails are facing you. Stretch the blade of grass lengthwise between the thumbs and the base of the hand. Your hands should be cupped to create a hollow or a narrow opening between your palms. You should just be able to see the edge of the grass only through the narrow opening. Place your lips over the opening and blow gently into the palm. You may even feel the grass blade vibrating as you blow. As you gradually blow you will hear sound of whistle created by grass.