

Chapter- 8

Grasslands of the Temperate Zone

STUDY NOTES

Let's Learn

Grasslands:

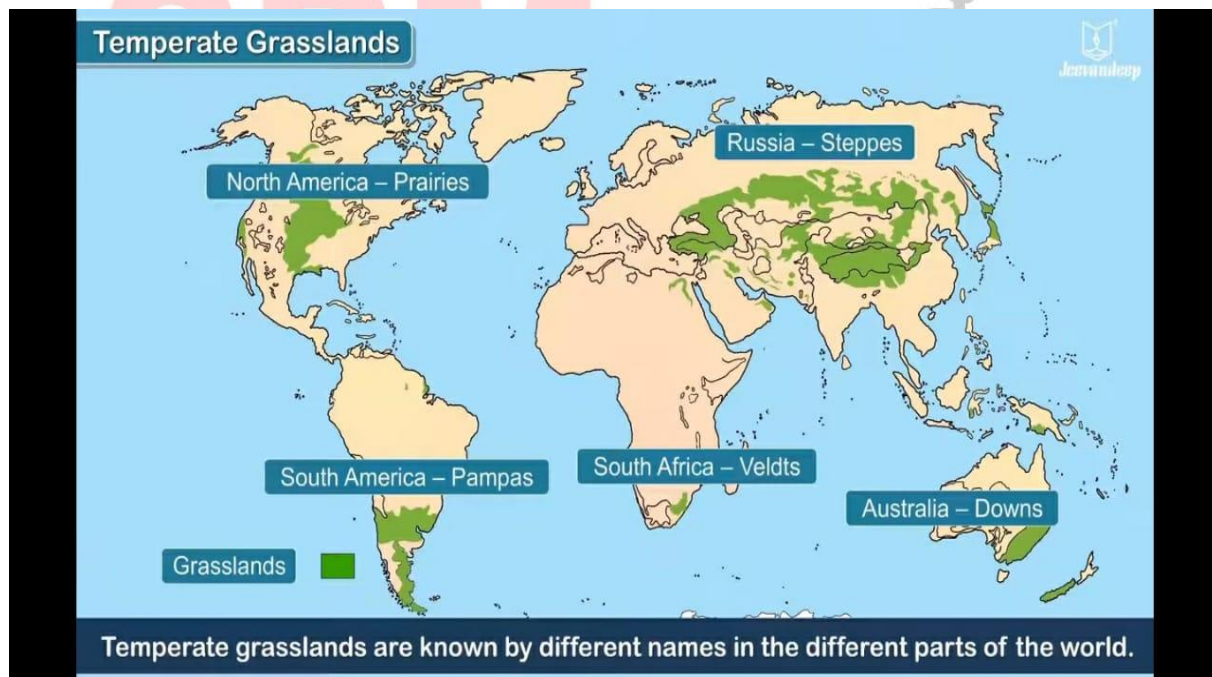


The temperate grasslands are located on both sides of the equator roughly between 40°N and 55°N in the Northern Hemisphere and 40°S and 55°S in the Southern Hemisphere.

- The places in this zone are neither too hot nor too cold.
- The temperate zone has less rainfall, which usually falls in summer.
- Hence, only grasses grow in such region and it is known as a grassland.
- Grasslands cover more than one-fifth of the land surface on the earth.
- These are enormous and flat plains of grass with very few trees and bushes.
- The summers are hot and the winters are cold. The rains are less, so forests cannot grow.
- The grasslands are known by different names in different regions.

The various grasslands are:

1. Prairies in North America
2. Steppes in Russia
3. Pampas in South America
4. Velds in South Africa
5. Downs in Australia



The Prairies

The vast stretch grassland situated in the interior of North America is called the **Prairies**. It is derived from the French word **Prairie** which means a large open area of grassland.



EDUCATIONAL GROUP

Location And Land

Changing your Tomorrow

- The Prairies in North America extend from Canada to Mexico.
- It is located in the Northern Hemisphere, roughly between the equator and the North Pole.
- The two big rivers, **Mississippi** and the **Missouri** pass through this region.

Climate And Agriculture

- In the Prairies, the climate is extreme.
- The winters are cold and the summers are hot.
- Rainfall is moderate and occurs mostly in the summer season.
- This climate is not suitable for trees to grow.

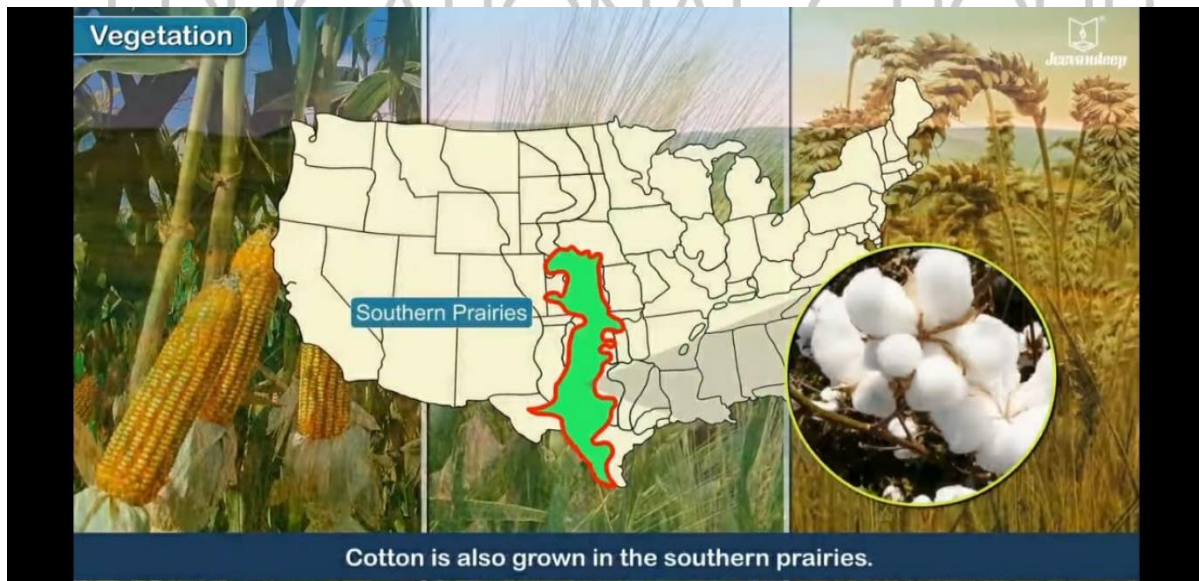
- Trees are rare in the Prairies, except along the river.
- Grasses grow quickly and are very tall.
- The spring season shows the best growth of grasses.
- Sometimes hot winds called **chinook**, which blow in spring over the Prairies help to melt the snow and make grazing possible.

Agriculture

- The presence of rivers Mississippi and Missouri and their tributaries are a boon for the farmers as they provide water for **irrigation**.
- This region is perfect for growing wheat and is therefore called the **Wheat Basket of the World**.
- These favourable conditions make the United States of America the largest producer of wheat in the world.



Vegetation



Wildlife

Herbivorous Animals



Rodents



Birds



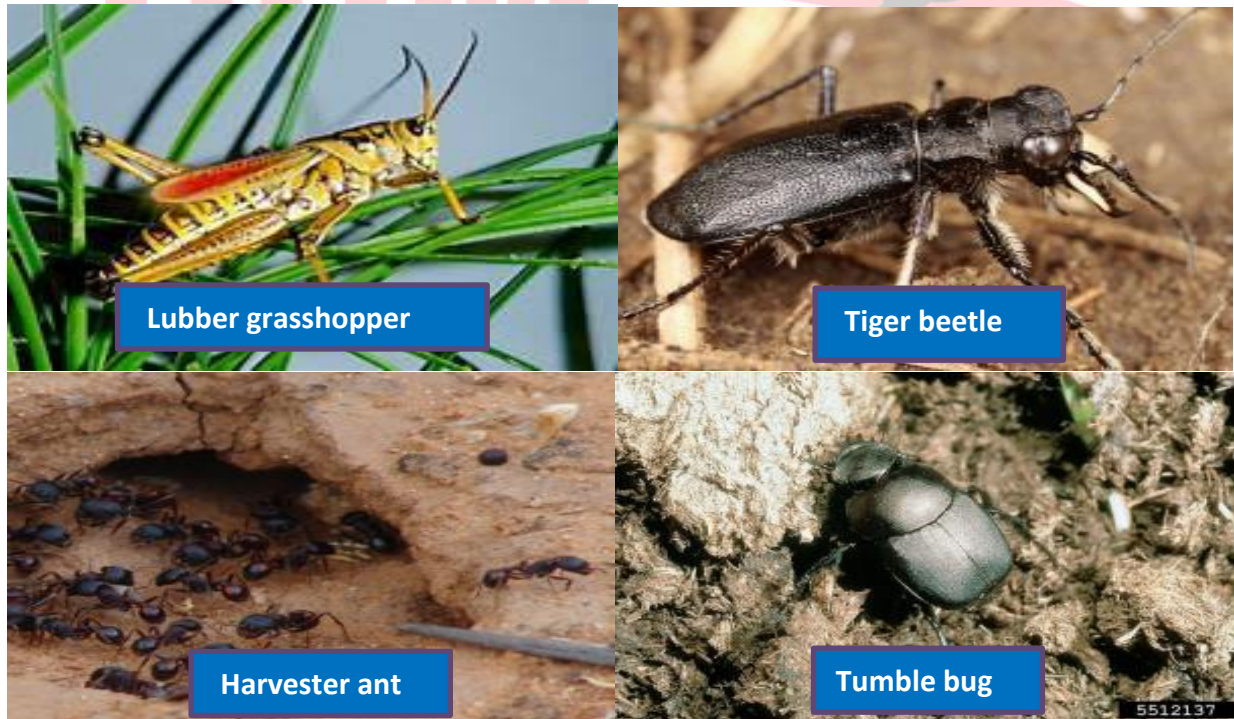
Carnivores Animals



Birds



Insects



Life Of The Farmers And Occupation

- Farms in the Prairies stretch over thousands of acres.
- On every farm, there are small **homesteads** in which the farmer's family lives with the workers called **cowboys**.
- Small sheds are built to keep cattle and farm machinery.
- They use scientific technologies with the help of machines.
 - ◆ Ploughing - The process of loosening and turning the soil is called ploughing (tilling).
 - ◆ Sowing - Sowing is the process by which seeds are buried inside the soil.
 - ◆ Harvesting - The harvest is the operation of gathering the useful or parts of the plant.
 - ◆ Threshing - The process of separating the edible part of cereal grain (or other crop) from the scaly.
 - ◆ Winnowing - The process by which chaff is separated from grain.



- The storing of food grains in the **silos** is done through machines.
- Huge harvesters are used to complete the work of hundreds of workers in a few hours.



Silos

- Animal rearing is another important occupation in the open hilly land towards the west.
- Here, the soil is not very fertile.
- Cattle-rearing is done in ranches that are well equipped with modern machinery.
- **Ranches** are the large open areas.
- Cattle are mostly reared for meat, which is consumed locally or exported to Europe.
- The city of Chicago is an important centre for slaughtering animals.
- Animals are also reared for milk and milk products.
- Well equipped, huge dairy farms are located near the cities.
- Prairies are rich in minerals like lignite, coal and minerals oil.
- Ore-crushing and oil refineries are well developed but the most important industries are those of meat packing and flour mills.

Life of the People



Cattle are raised on large farms called 'ranches' in hilly areas where the soil is not very fertile.

Life of the People



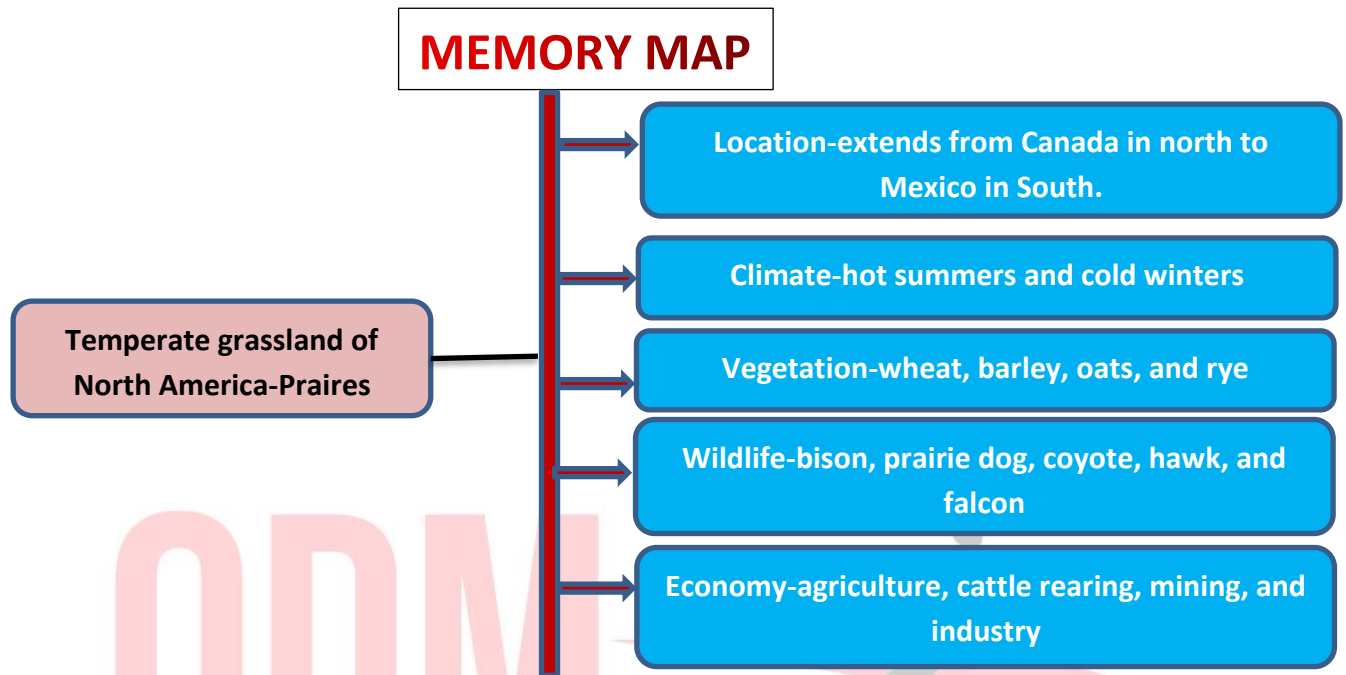
Dairy products

Meat products

Life of the People



Chicago is an important centre for slaughtering animals.

Let's know more

Write 'True' or 'False'.

- There are not many trees in Prairies.
- Rice is the most widely grown crop here.
- The condition of farmers is not good in prairies.
- Chicago is the main centre for slaughtering of cattle.

Let's Do**A. Fill in the blanks.**

1. Most grasslands lie in the _____ Zone.
2. Prairies have _____ summers and _____ winters.
3. The _____ and _____ rivers flow through the prairies.

- The main crop grown in the prairies is _____.
- Large farms in the western part of the prairies, used to rear cattle, are known as _____.

B. Match the columns.

- | | |
|-------------|-------------------|
| 1. Steppes | a. North America |
| 2. Veld | b. South America |
| 3. Downs | c. Russia |
| 4. Prairies | d. Australia |
| 5. Pampas | e. Central Africa |
| 6. Savannas | f. South Africa |



Understand and Answer

C. Answer the following questions.

- Where are most grasslands of the world situated?
- What are the prairies?
- Describe the climate of the prairies.
- There were millions of bison a few hundred years ago in the prairies. But we cannot see any now. Why?
- Why are the prairies so attractive for farming?
- What is the main occupation of the people in the western part of the prairies?
- What is a ranch? What are the main products of a ranch in the prairies?
- The prairies have a small population. Why?

Teacher's Note

The extensive grasslands have been converted into agricultural land. This activity has affected the wildlife of the region. What measures should be taken to preserve the natural habitat of animals?

Improve your G.K

- Africa is the only continent to have both temperate and tropical grasslands i.e Veld and Savannah.
- 25% of the Earth is covered by Grasslands.
- There is a grassland in each continent except Antarctica.
- The grasses in tropical grasslands tend to be longer than that of temperate because of the constant warm weather and additional rainfall it receives.
- There are two seasons in the temperate grassland: the growing season and the dormant season. Plants do not grow during the dormant season because the climate is too cold during that time.

ANSWER KEY**Let's know more**

Write 'True' or 'False'.

- T
- F
- F
- T

Let's Do**A. 1. Temperate**

2. Hot, cold
3. Mississippi, Missouri
4. wheat
5. Ranches

B. 1. Steppes - c. Russia

2. Veld - f. South Africa
3. Downs - d. Australia
4. Prairies - a. North America
5. Pampas - b. South America
6. Savannas - e. Central Africa

C. 1. Most of the grasslands of the world are situated in the Temperate Zone.

They lie between -

- Latitudes $23\frac{1}{2}^{\circ}\text{N}$ & $66\frac{1}{2}^{\circ}\text{N}$ in Northern Hemisphere.
- Latitudes $23\frac{1}{2}^{\circ}\text{S}$ & $66\frac{1}{2}^{\circ}\text{S}$ in Southern Hemisphere.

2. The prairies are a vast stretch of flat land covered by miles and miles of grass. The grass is green in summer and turns brown in autumn. The soil is very fertile because of large quantities of humus present in the soil.

3. Climate of Prairies

- Prairies are in the middle of the continent of North America. As a result, the climate is continental, i.e
- Summers are warm with temperature 20°C .
- Winters are cold with temperature -20°C .

- Moderate rainfall occurs, mostly in summer.
4. There were millions of bison a few hundred years ago in the prairies. But we cannot see any now. It is so because -
- Most of the land has been cleared for agriculture.
 - Bisons were hunted for slaughter purpose.
 - Introduction of bovine diseases from domestic cattle was also a reason for making bison an extinct animal.
 - Wild bison today, are largely restricted to a few national parks and reserves.
5. Prairies are so attractive for farming because -
- The soil is very fertile.
 - Water is available in plenty from the Mississippi and Missouri and their tributaries.
 - The climate is suitable for cultivation of wheat for which USA produces so much wheat that it is called the “Wheat basket of the world”.
6. The main occupation of the people in the western part of the prairies is cattle rearing for beef and dairy products. It is so because -
- Towards the west, the prairies are hilly and soil is not so fertile.
 - These areas are mainly used to rear cattle in large forms called ranches.
 - The cattle are sent to slaughter houses in the cities for production of beef.
7. Ranch is a large farm where cows, horses or sheep are kept. The main products of a ranch in the prairies are -
- Beef of cattle.
 - Dairy products.
8. The prairies have a small population because the farms are huge, and machines do most of the work, therefore the population in the region is thin.

Multiple choice questions.

1. Most of the grasslands of the world lie

- a. Between latitude $23\frac{1}{2}^{\circ}\text{N}$ and $23\frac{1}{2}^{\circ}\text{S}$
- b. North of latitude $66\frac{1}{2}^{\circ}\text{N}$ and south of latitude $66\frac{1}{2}^{\circ}\text{S}$
- c. Between latitude $23\frac{1}{2}^{\circ}\text{N}$ and $66\frac{1}{2}^{\circ}\text{N}$, and between latitude $23\frac{1}{2}^{\circ}\text{S}$ and $66\frac{1}{2}^{\circ}\text{S}$
- d. Near the poles

Ans. C

2. The grasslands in North America are known as the

- a. Prairies
- b. pampas
- c. savannas
- d. downs

Ans. a

3. The natural vegetation in the prairies consists of

- a. Dense forest of tall trees with grass growing below
- b. Plenty of grass and a number of tall trees
- c. Plenty of grass and very few trees
- d. Wheat crop

Ans. c

4. In which part of the prairies are most of the ranches present?

- a. North
- b. south
- c. west
- d. east

Ans. c