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Life in Temperate Grasslands (The Prairies and the Velds)

Lesson Plan

Contents

- ▶ An overview of the temperate grasslands on two different continents
- ▶ To understand the environment of temperate grasslands in two different continents and the lifestyles of the people living there

Objectives

- ▶ To understand the temperate grasslands and their features
- ▶ To learn about the lifestyle of people living there
- ▶ To know how the environment affects the lifestyle and vice versa
- ▶ To appreciate the differences in environment and lifestyles

■ Teacher's Aids

- ▶ Globe
- ▶ Pictures, charts, atlas and wall maps
- ▶ Blackboard
- ▶ Internet

■ Tips for Teacher

- ▶ Explain the environment of temperate grasslands, and the lifestyle of the people, including references to other such regions.
- ▶ Focus on the differences, too.
- ▶ Students should be encouraged to know places, locations and their placement on the maps.

■ Background and Reading

- ▶ Read the lesson aloud and explain, sharing the aids, etc., pausing to examine and explain the data in the boxes.
- ▶ Particularly focus on the differences in the environment and the lifestyles of the people clearly.

Life in the Prairies

- ▶ Temperate grasslands: In the interiors of continents – in rain-shadow areas of mountains – between 35° and 55° latitudes in both hemispheres – moderate climate and limited rainfall in summer – climate not suitable for trees – grass found here – two main types: Tropical and Temperate grasslands.
- ▶ Temperate grasslands known by different names in different places – North America: Prairies; South America: Pampas; South Africa: Velds; Australia: Downs; Europe: Steppes.

Location:

- ▶ Prairies: Latin 'priata' means meadows – found in North America: Interior parts of USA and Canada – between Rocky Mountains on west and Appalachian Mountains on east and Great Lakes in the northeast.
- ▶ Canadian Prairies: Provinces of Alberta, Saskatchewan, Manitoba and Ontario – drained by tributaries of Saskatchewan river – Winnipeg called the Gateway to the Prairies.
- ▶ Prairies of the USA: States of North Dakota, Kansas, Texas, Colorado, Oklahoma, Minnesota, Montana, Iowa, Wisconsin – drained by the Mississippi.

Features:

- ▶ Flat, slightly undulating landscape – slight slope upwards to west and south – few plateaus and hills – largely covered with short grasses and mostly treeless.

Climate:

- ▶ Extreme or continental type of climate – summer 20° C and winter –20° C – Canadian prairies under snow almost throughout the winter months – high difference between day and night temperatures.
- ▶ Average annual rainfall about 50 cm – during spring and summer – winds of great speed, no obstacles – Chinook winds during winter from eastern slopes of Rockies, warm, dry – raise temperature during winter and melt the snow.

Natural Vegetation:

- ▶ Short grasses, scrubs and scattered trees – main trees: Willows, poplars, elders – grow along banks of rivers and lakes and on mountain slopes – grasslands now converted to farmlands – grass suitable for cattle rearing.
- ▶ Wildlife: American buffalo or bison – indiscriminately killed – hunted by European immigrants – now a protected species – other animals: Badger, Prairie dog, coyote [Prairie wolf], jackals, foxes, antelopes, rattlesnakes, rabbits, gophers – birds: Hawks, eagles, owls.

People in the Prairies

- ▶ Originally Red Indians or American Indians – tribes like Apaches, Cree, Crow, Pawnee, etc. – now mostly migrant Europeans and their descendants – sparsely populated – people very hardworking.
- ▶ Major occupations – farming and cattle rearing – agriculture where rainfall over 50 cm – large-scale farming, using modern scientific methods: Machines like tractors, harvesters,

combines, etc.–use modern methods like crop rotation, contour ploughing, strip cropping, for higher yield and to prevent soil erosion–maize [corn] most important crop–also potatoes, soyabeans, cotton, alfalfa; Canadian Prairies: Wheat in spring; US Prairies: Wheat in winter–most crops sold in market–exported to Europe and Asia–area known as Granaries of the World.

- ▶ Dairy cattle raised in eastern part of Prairies–from Great Lakes to the Atlantic coast–near big cities mostly–many food processing units based on dairy farming and large-scale production of crops–beef cattle on large farms called ranches–looked after by cowboys–major meat-packing centres: Chicago, Kansas City, Omaha, etc.
- ▶ Extensive deposits of coal and iron–vast network of roads, railways, airways and canals developed–industries based on agro-products and minerals.
- ▶ Important cities: USA: Chicago, Minneapolis, Indianapolis, Kansas, Denver, Omaha, etc.; Canada: Winnipeg, Edmonton, Regina, Calgary, Saskatoon, etc.

Life in the Velds

- ▶ Velds–Dutch word meaning 'field'–temperate grasslands.

Location

- ▶ Eastern part of the plateau of South Africa–altitude between 600–1000 m–Drakensburg Mountains in the east; Kalahari Desert in the west; Northeast is High Veld about 1600 m above sea level–The Witwatersrand [the ridge] passes through the middle of the High Veld–Main rivers: Orange, Vaal, Limpopo, etc.–form waterfalls crossing the plateau.

Climate

- ▶ Moderate climate–due to location and influence of Indian Ocean–seasons reverse of those in Prairies–winter in July cold and dry–average temperature 5° C–10° C–sometimes at night falls below 0° C–summers short, warm, wet–rainfall low in summer–decreases from south to north and from east to west–droughts common.

Natural Vegetation

- ▶ Controlled by semi-arid climatic conditions–sparse–short and long grasses–trees like acacia and marula in higher regions.

Wildlife

- ▶ Leopards, cheetah, oryx, kudu, etc.

People in the Velds

- ▶ Main occupations: Mining, farming, cattle rearing–farming not very important because of low rainfall, poor soils and occasional droughts–humid areas–maize main crop–others: Wheat, barley, oats, potatoes; cash crops like sugar cane, cotton, tobacco.
- ▶ Sheep rearing main occupation in High Veld–merino sheep best quality wool–developed wool industry–angora goats produce mohair–South Africa important producer of wool.

- ▶ Cattle rearing in warmer and wetter regions–dairy products, like milk, butter, cheese, etc.–meet domestic needs and for export–also meat and leather–beef exported to Europe.
- ▶ Rich in minerals–coal, iron, gold, diamonds, uranium–mining important occupation–Johannesburg: Gold; Kimberley: Diamonds–many industries: Iron and steel; metal products; machinery; railway equipment; etc.–agro-based industries: Woollen textiles, food processing, dairy and leather goods.
- ▶ South Africa became British colony–well developed transport system–roads and railways–major towns now connected by air.
- ▶ Dutch first Europeans to settle in the Veld–grasslands original settlers Hottentots, an African tribe: Primitive hunters and gatherers–now a few survive and are nomadic herders.

Assessment Corner

Oral Assignment

- A. Ask for the answers at random from the students. Confirm the right answers. Let them write down the correct answers if they like in their books.

Written Assignment

- B–E. The teacher has two options–(i) Either do these exercises orally first and then ask the students to write them down. OR (ii) Ask the students to write the answers on their own. Then the teacher can announce the correct answers and the students can ask their partners to cross-check them.

In either case, the answers can be written as homework and the teacher can check them in the class.

Think Tank

- F. **HOTS questions:** Discuss the four questions in the class and let the students write the answers to G and H as homework. Teacher should assess individual work.