

Chapter 2

Geography and the Environment

Objectives

To gain an understanding of the geography of Egypt and its influence on the ancient Egyptian way of life, and to develop skills in information gathering and analysis.

Mystery

Why did the ancient Egyptian civilization emerge in the Nile Valley? What environmental factors provided the right setting for nomadic hunters and gatherers to settle into farming communities?

Discussion and Research Projects

1. Describe how Egypt's geography has changed since the time the country was covered by an ancient sea.
2. What geographic features allowed ancient Egypt to develop in relative isolation from its neighbours?
3. Explain why the Nile River Valley is considered a gift to Egypt.
4. Describe the annual flood cycle of the Nile. Why was this so important to the survival of the people?
5. In the ancient Egyptian calendar, the new year began in July. Can you think of a reason for that?
6. What were the principal crops and domesticated animals raised by the ancient Egyptians?
7. What are the main crops and animals raised in Egypt today?
8. How did the ancient Egyptians travel around the country? What animals were used to move goods on land?



9. The civilization of ancient Egypt was one of the first to emerge. What factors contributed to its development?
10. Name some of the dangerous animals and insects that live in and along the Nile.

Creative Projects

1. Use **Activity Sheet 2** to make a map of Egypt. Name the major geological features, such as the rivers, delta, lakes and deserts, and indicate the location of the principal cities, pyramids, tombs and temples of ancient Egypt.
2. Use **Activity Sheet 3** to identify the animals of ancient Egypt and learn about their habits and characteristics. This will give your students insight into why the ancient Egyptians chose certain animals to represent their gods.
3. Use **Activity Sheet 4** to learn about some of the plants that were important to the ancient Egyptians.
4. Make a chart showing the average temperatures and precipitation in your region and in Egypt in December and July. Describe the winter and summer climate in Upper Egypt (southern region, around Aswan) and Lower Egypt (northern region, around Cairo and the delta).

FACT SHEET: Geography and the Environment

Early Beginnings

The desert and the Nile River emerged when the ancient sea that covered most of Europe and northern Africa 45 million years ago shifted, forming the Mediterranean Sea basin. This shift occurred when the earth's plates moved, creating the Himalayas and the Alps. As the Mediterranean basin sank to a much lower level than it is today, the Nile rushed down to it from the Ethiopian highlands. Over thousands of years, it evolved into its present shape. Fossils from the ancient sea can still be found throughout Egypt.



The Nile River with the Valley of the Kings in the distance
CMC S97 10231

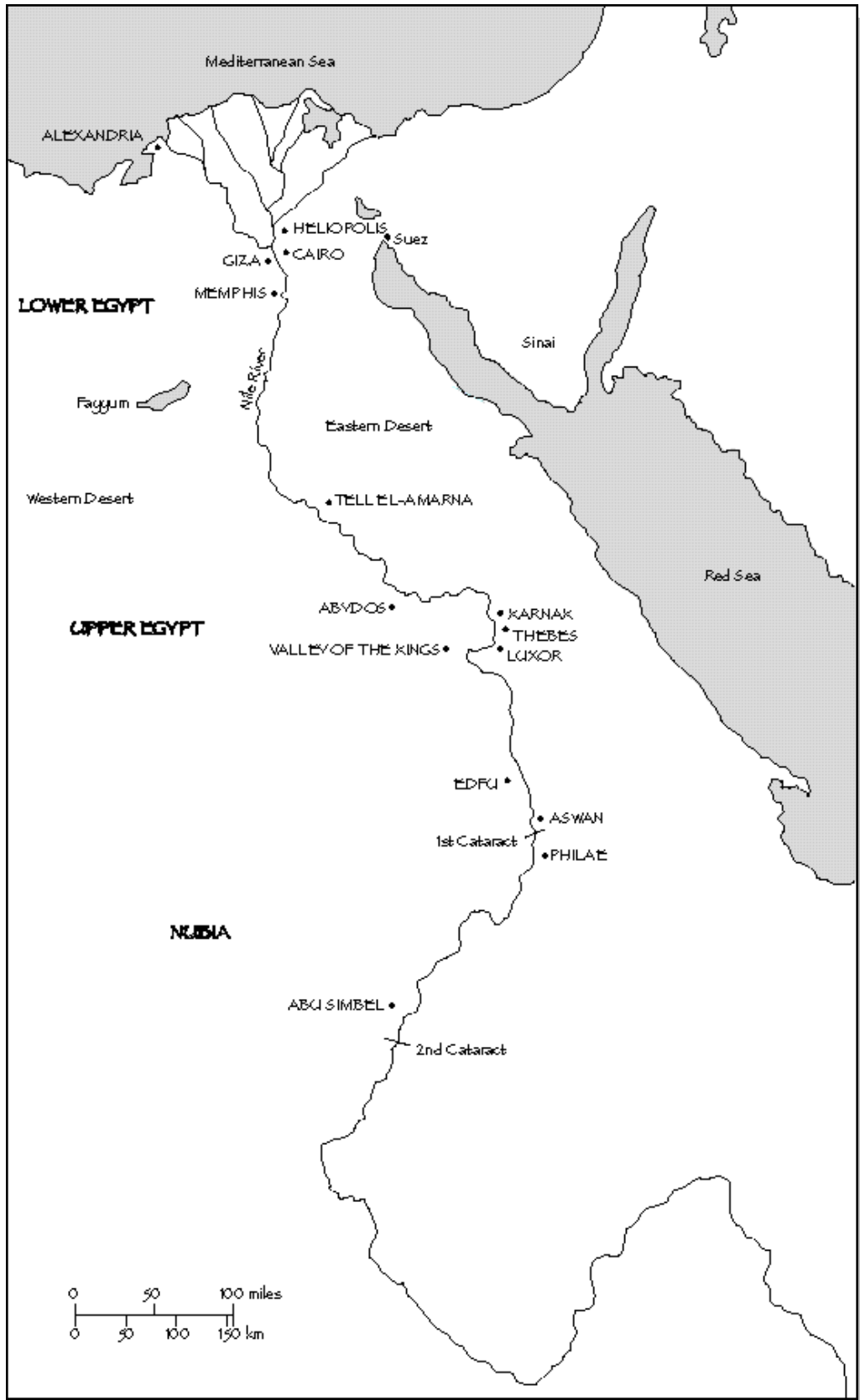
The northern region of Egypt is surrounded by two deserts, the mountainous Eastern, or Arabian, Desert and the sandy Western, or Libyan, Desert. In ancient times, the Egyptians called the desert the “red land”, distinguishing it from the flood plain around the Nile River, called the “black land”. These colours reflect the fact that the desert sands have a reddish hue and the land around the Nile turned black when the annual flood waters receded.



The desert near Giza
CMC S97 10082

In the pre-dynastic period, nomadic hunting tribes roamed these desert regions as they had done for centuries, stopping at oases to replenish their water supplies. Around 5000 B.C., when the climate became more arid, they retreated to the Nile Valley, creating the first urban settlements and making a transition from hunting to farming. These communities were concentrated in the northern and southern regions. As a result, Egypt became known as the “Double Land” or the “Two Lands” of Upper and Lower Egypt.

The two lands were united in 3000 B.C. by the legendary King Menes (who is believed to have been King Narmer). He established a new administrative city where the Nile River branches out into the delta. In ancient times, it was called “White Walls” or Mennefer; the Greeks called it Memphis (near Cairo). It remained the capital of Egypt until the New Kingdom, when Thebes became the capital.



Ancient Egypt

In the pre-dynastic period, Egypt's isolation was a determining factor in the birth of its civilization.¹ The majority of Egyptians lived in the Nile Valley, which is bounded by deserts. To the north lay the Mediterranean, and to the east, the Red Sea, leaving them virtually isolated from their neighbours on all sides except the Sinai Peninsula. The country's geography protected it from invasion and allowed the people to develop a strong sense of national identity and a highly individual culture. The way the pharaohs perceived themselves reflects the country's pride. They considered themselves to be gentlemen — the only true men — and spoke of the leaders of neighbouring countries in contemptuous terms, calling them vile.²

Nile River Valley

The majestic Nile River flows north from the headwaters in Burundi to the Mediterranean Sea, a distance of 6,741 kilometres³ (4,189 miles). This makes it the longest river in the world!

The shape of the Nile River Valley resembles a lotus flower, the ancient Egyptian symbol of the regeneration of life. The long, narrow river valley is the stem, the delta that spreads out in the shape of a triangle is the flower, and the Fayyum region is a bud.

The Upper Nile is divided into three tributaries: the White Nile, the Blue Nile and the Atbara River. The White Nile flows from sources near Lake Victoria, and the Blue Nile originates in the Ethiopian mountains. The Atbara River flows from the Ethiopian highlands and meets the combined White Nile and Blue Nile just north of Khartoum. Before the river enters the Mediterranean Sea, it divides into four smaller tributaries in the delta region.

For centuries, the Nile River flooded the valley, enriching the land with a thick layer of alluvial soil. Flooding occurred from July to September as the result of the tropical rains in the Ethiopian tableland. The river attained its highest level in October then began to recede to its lowest point sometime between April and June.



Two figures of the Nile god, Hapi, tying lotus and papyrus plants together around the lungs and windpipe of Egypt. The drawing symbolizes the union of Upper and Lower Egypt.

CMC ECD98-025 #8



Bas-relief of Hapi, the god who controlled the flooding of the Nile

CMC ECD98-019 #94

Some degree of flood control has been practised since early times. River banks were raised and canals dug to funnel the water over the land. Elaborate precautions were taken to prevent overflowing, but, at times, excessive flooding caused destruction and a loss of property and life. The land has not experienced flooding since the construction of the Aswan Dam, however. The dam was built in 1902 and raised to its current height sixty years later.

Agriculture

The flooding of the Nile rendered the narrow strip of land on either side of the river extremely fertile. Intensive agriculture was practised by the peasant population. As the flood waters receded, sowing and ploughing began, using primitive wooden ploughs.

Since rainfall is almost non-existent in Egypt, the floods provided the only source of moisture to sustain crops. Irrigation canals were used to control the water, particularly during dry spells. The principal crops cultivated during the Pharaonic era were barley, emmer (a coarse wheat), lentils, beans, cucumbers, leeks, onions, dates, figs and grapes. The abundance of flowers provided nectar for bees to produce honey, which the Egyptians processed. Flax was grown for making linen.

A variety of domesticated animals were raised, including cattle, oxen, sheep, goats, pigs, ducks and geese. Donkeys and horses came from Asia around 1600 B.C., and camels were introduced around the ninth century B.C. In early pharaonic times, camels were unknown.



Peasant farmers used shadufs to conduct water from canals onto the fields to irrigate the crops.

Painting: Winnifred Needler
Photo: Harry Foster (CMC S97 10791)



Harvesting wheat

Painting: Winnifred Needler
Photo: Harry Foster (CMC S97 10796)

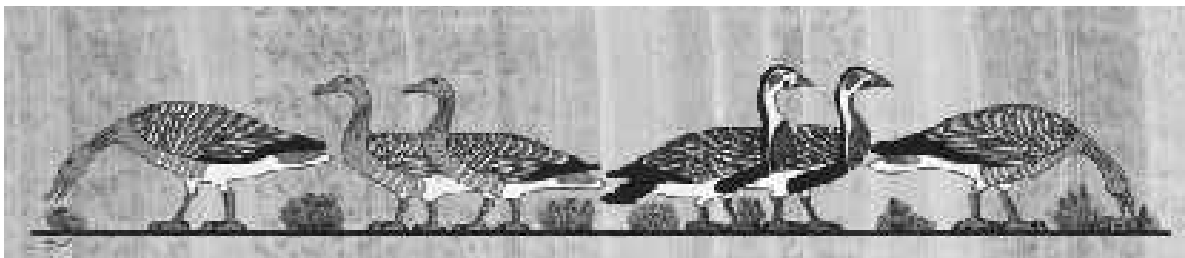


Image of geese painted almost 5,000 years ago on the wall of a tomb near the pyramid of Meidum

Photo: Harry Foster (CMC S98 3541)

The Marshes

The marshes and swamps along the Nile were well stocked with fish, including mullet, perch, eel and catfish. Nearly all the species were edible. They were eaten raw, dried or pickled.

The wetlands were also the nesting and feeding grounds of a variety of birds, animals and insects. Frogs, grasshoppers, butterflies, dragonflies, kingfishers, ibis, herons, pigeons, lapwings, weasels and mongooses are but a few of the species found there. Crocodiles, hippopotamuses, scorpions and poisonous snakes were particularly dangerous. The ancient Egyptians hunted the hippopotamuses but left the crocodiles alone, fearing the god of these animals.

A rich variety of plants were harvested in the swamps and marshes. Of chief importance were papyrus, reeds and water lilies (lotus). Papyrus stalks and reeds were used to make ropes, mats, baskets, huts and light skiffs (boats). Papyrus was also made into paper, and part of the stalk was chewed, much like the way people chew on sugar cane. Water lilies were collected for their perfume and their beautiful petals.



Hunting birds in the marshes
CMC ECD98-024 #44



Man casting a fish net from a papyrus skiff
CMC ECD98-027



Marshland along the Nile River

Photo: Danielle Cormier (CMC S97 10679)

The Climate

Classified as desert, Egypt is a hot, dry country. The deserts that surround the Nile Valley comprise over 90 percent of the country's surface. In the summer, the upper regions are dry and the delta humid. In the winter, the temperature is more moderate, and at night, the desert can be cold, even in the summer.

The days are generally bright and sunny throughout the year. There is virtually no rain in the summer, and very little in the winter. From March to mid-May, dust storms can rise up, keeping people indoors.