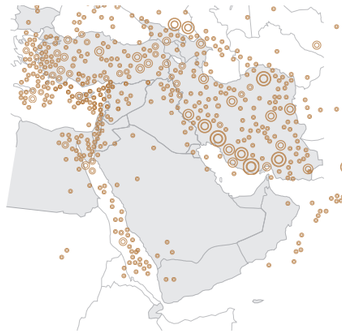
Geography of the Middle East

LANDFORM

Tectonic Zones

- african plate
- turkish plate
- arabian-Nubian shield
- arabian plate
- eurasian plate
- plate motion



Seismic Areas

major earthquakes (1966 - 2004)

Soil Patterns

- mountain soils
- desert soils
- dune sand
- sandy materials
- solonchaks
- mediterrenae soils
- steppe soils
- salt flats
- alluvial soils

Desert Areas

- desert
- oasis

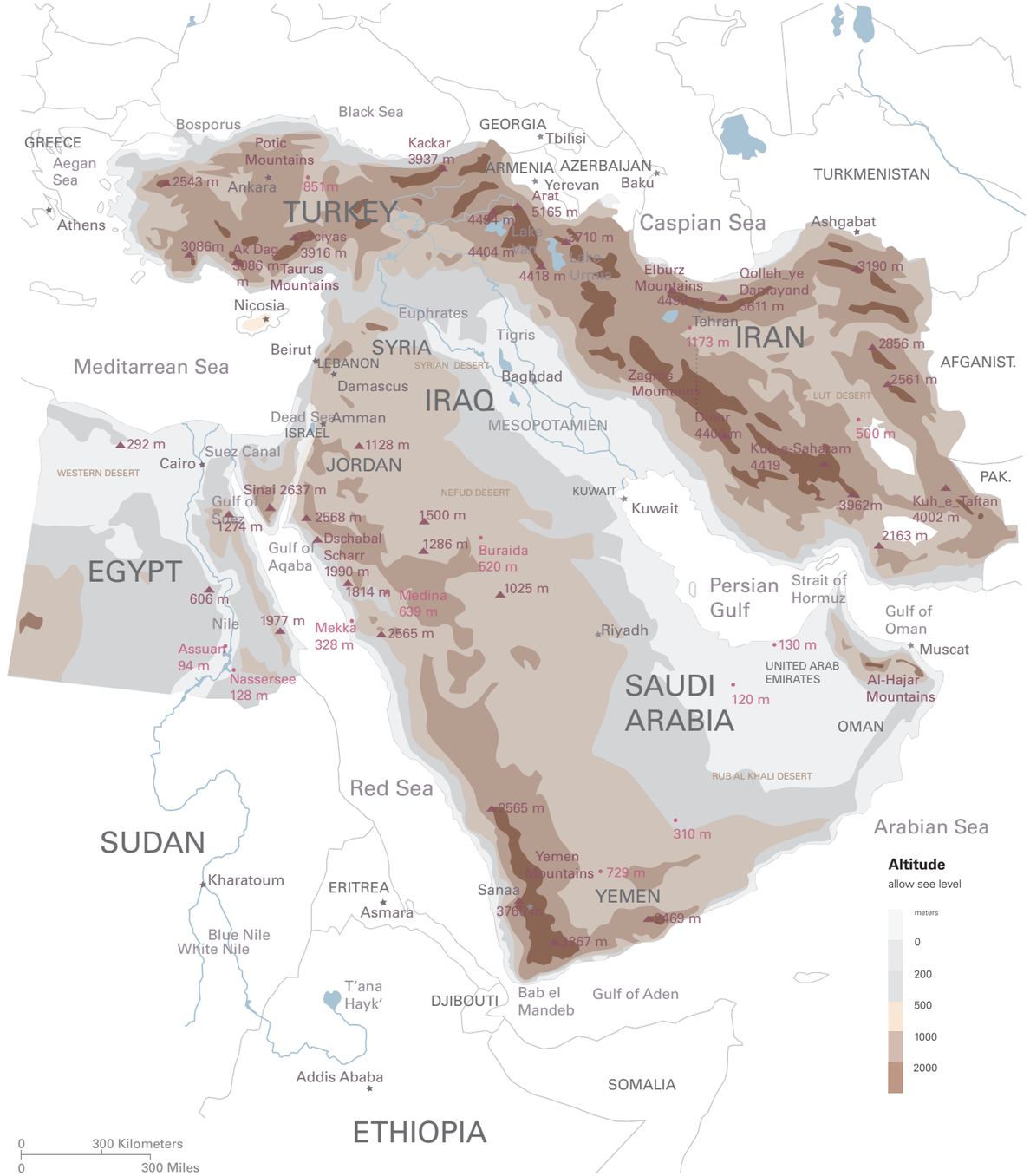
WATER RESOURCES

Annual Precipitation

- 1000 mm
- 500 mm
- 300 mm
- 0 mm

Groundwater

- highly productive aquifer
- moderately productive aquifer
- limited groundwater



GENERAL PATTERNS OF THE MIDDLE EAST

Geography of the lands

The Middle East region represents an area of over 5.0 million square miles. The physical geography of the Middle East is varied. Vast deserts are common in the region. The Sahara Desert runs across North Africa, essentially limiting settlement to along the Mediterranean coastline and in Egypt along the Nile River.
The desert of the Arabian Peninsula is so inhospitable that it has been given the name "The Empty Quarter." Other significant deserts exist throughout the region. In areas better served by rainfall and rivers (for example the Tigris-Euphrates river system, the Jordan River, and along the Mediterranean coast), rich agriculture is abundant. Mountain ranges exist throughout the region with some peaks rising as high as 19,000 feet.

Snow is a common sight in these mountain ranges. Between the mountains, high plateaus are common.
Ease of movement in and out of the Middle East by water is also affected by the presence of a number of narrow water passageways. Gibraltar controls the water route linking the Atlantic Ocean and the Mediterranean Sea. Water access between the Mediterranean and Black Seas is only possible through the Bosporus and the Dardanelles, which in some places is only half a mile wide. Other critical water routes would include: the Suez Canal, which links the Mediterranean Sea to the Red Sea; Bab el Mandeb, a strait that separates the Red Sea from the Indian Ocean; and the Strait of Hormuz, which links the Persian Gulf and the Indian Ocean.

Surface water

Surface water in most of the region drains to the Mediterranean, Red, or Dead Seas. In the large desert watersheds, most streams flow only in response to storms and drain internally, the water evaporating or infiltrating the ground. Surface water is very limited in the region because of generally low rainfall and high evapotranspiration. However, nearly all of the available, fresh surface water is used and together with springs supply about 35% of total water use in the region.Streamflow characteristics change rapidly across the region and closely follow precipitation patterns.
Annual streamflow generally declines from west to east with distance away from Mediterranean moisture sources, and from north to south with increasing temperature and evaporation.

Groundwater

In addition to surface water, underground water is of vital significance in the Middle East and has been for thousands of years.
Some groundwater comes to the surface in natural springs-artesian springs (ayns in the Arab lands), or contact springs-or emerges from caverns dissolved in limestone.
Some wells in desert areas, especially those sunk by nomads, may be only a few feet deep, dug into the sand and gravel of a broad wadi or an alluvial fan.Especially in Iran, but also in other Middle Eastern areas, water in alluvial fans is tapped by a remarkable qanat system (also called foggara, falaj, karez), underground tunnels with spaced access wells reaching the surface.

Geography of the Middle East

MIDDLE EAST VEGETATION PATTERNS

The fertile crescent

The Fertile Crescent is a region in the Near East, incorporating the Levant and Mesopotamia, and often incorrectly extended to Egypt. The region of the Fertile Crescent broadly corresponds to present-day Iraq, Syria, Lebanon, Israel, Kuwait, Jordan, south-eastern Turkey and west and south-western Iran. The region was named so due to its rich soil and crescent shape.
As crucial as rivers were to the rise of civilization in the Fertile Crescent, they were not the only factor in the area's precocity. Ecologically the area is important as the "bridge" between Africa and Eurasia. This "bridging role" has allowed the Fertile Crescent to retain a greater amount of biodiversity than either Europe or North Africa, where climate changes during the Ice Age led to repeated extinction events due to ecosystems becoming squeezed against the waters of the Mediterranean Sea.

Cresent-shaped region

the fertile crescent

CLIMATE

Climate types

dry arid / semiarid

midlatitude

	Max °C	Min °C	Max °C	Min °C
	July		January	
Abu Dahbi, UAE	39	29	24	14
Bagdad, Iraq	43	24	16	4
Beirut , Lebanon	31	23	17	11
Cairo, Egypt	36	21	18	8
Damascus, Syria	36	18	12	2
Istanbul, Turkey	27	18	7	2
Jerusalem, Israel	31	17	13	5
Muscat, Oman	36	31	25	19
Riyadh, Saudi Arabia	42	26	21	8
Tehran, Iran	28	22	7	-3

Daily Temperatures July

35 °C

30 °C

20 °C

10 °C

Daily Temperatures January

20 °C

10 °C

0 °C

- 10 °C

FAUNA IN THE MIDDLE EAST

Common types

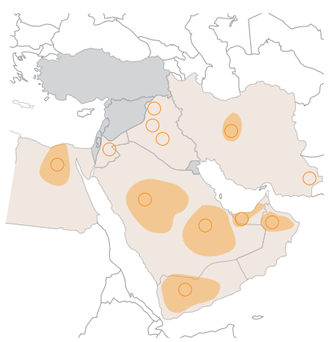
The varied Middle East environments support a rich variety of fauna.

Dromedary, civet, flamingo, fox, gazelle, hare, hedgehog, arabian horse, hena, ibex, jackal, jerboa, lesser bustard, lizard, locust, oryx, peregrine falcon, porcupine, sand cobra, scorpion, skunk,

chameleon,viper, blac bear, capian seal, fox, bear,mountain goat, red mountain sheep, rabbits, tiger, caspian seal, desert onager, antelope, wild ass, hyena, jackal, wild pig, hare, jerboa, bat, vulture,

buzzard, raven, owl, duck, goose, partridge, sand grouse, lizards, ostriche, oryxe, mountain goat, panther, wildcat, hedgehog, sand rat, jerboa, deer, wildcat, porcupine, squirrel, marten, goose,

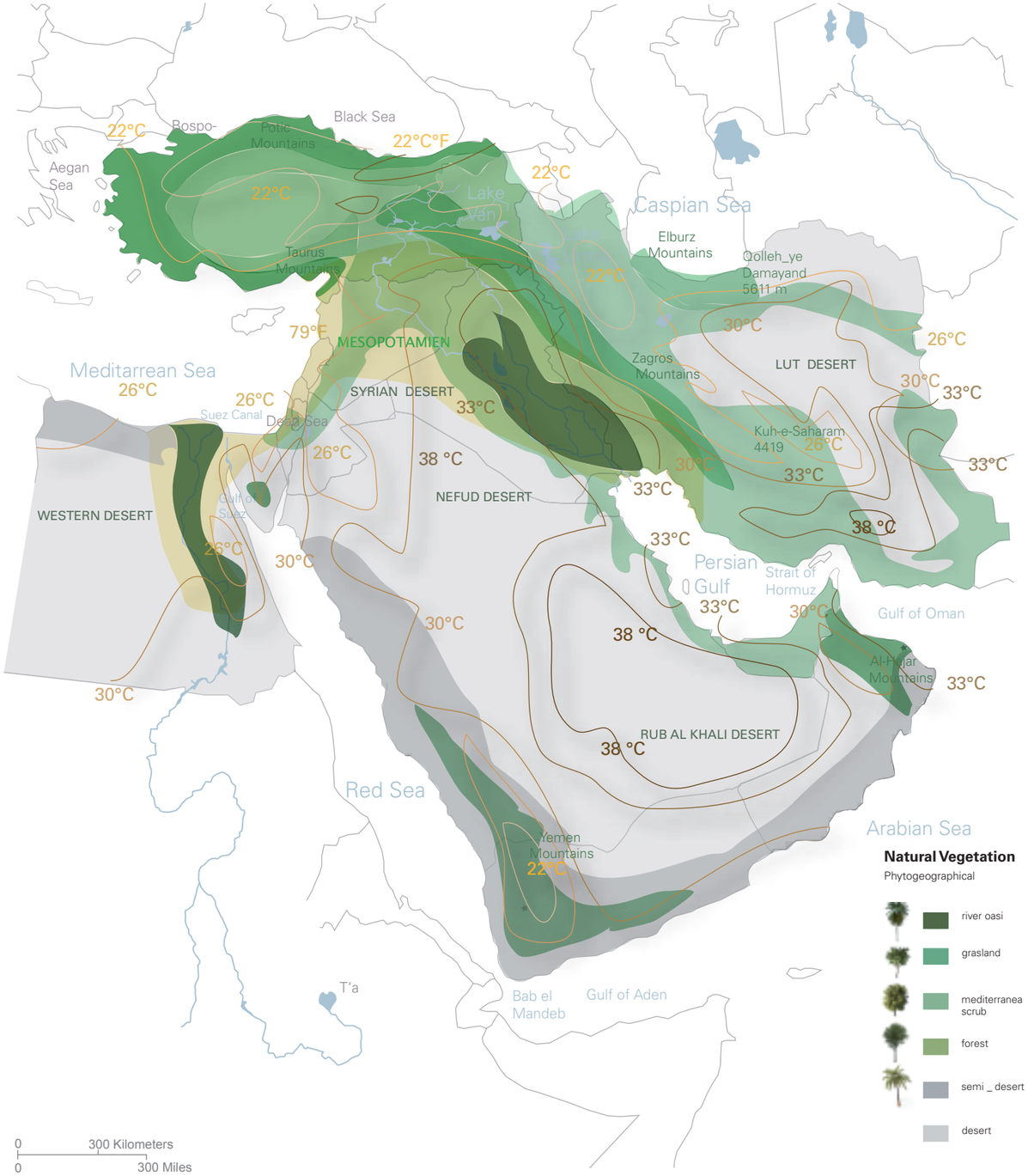
partridge, quail, eagle, buzzard, hawk, kestrel, bonito, mackerel, bluefish, crocodile, hippopotamus, arabina cammel, desert locusts, baboon, dog family , peregrine falkon, onager, porcupine.



Arabian Camel

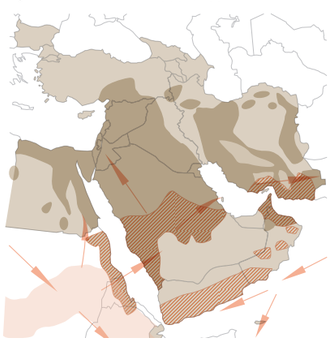
100 000 exemplars

headcount 10 % of the top market



0 300 Kilometers

0 300 Miles



Desert Locusts

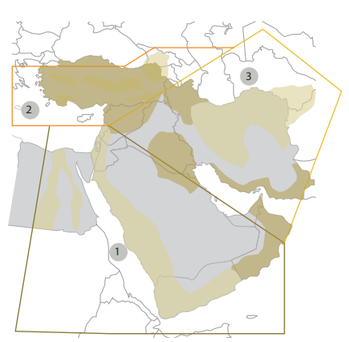
developing

in spring

in monsoon

in winter

principal migration route



Peregrine Falkon

distribution

winter migration

subspecies

1 Pelegrinus

2 Brookei

3 Babylonicus

Natural Vegetation

Phytogeographical

river oasi

grasland

mediterranea scrub

forest

semi _ desert

desert