

Periplus maris Erythraei

Adapted from *The Periplus of the Erythraean Sea*, annotated by Wilfred H. Schoff, New York, NY: Longmans, Green and Co., 1912.

Sometime in the middle of the first century AD, an anonymous merchant or sailor compiled a guidebook to the ports and sailing conditions of the Erythraean Sea. The *Periplus maris Erythraei* ("Guidebook of the Erythraean Sea") is the only document of its kind known to have survived. The regions we know as the Gulf of Aden, the Persian Gulf and the Indian Ocean were called the Erythraean Sea by ancient geographers, sailors, and travelers.



§ 4 “ . . . *Opposite Mountain Island, on the mainland twenty stadia from shore, lies Adulis, a fair-sized village, from which there is a three-days' journey to Coloe, and inland town and the first market for ivory. From that place to the city of the people called Auxumites there is a five days' journey more; to that place all the ivory is brought from the country beyond the Nile through the district called Cyeneum, and thence to Adulis. Practically the whole number of elephants and rhinoceros that are killed live in the places inland, although at rare intervals they are hunted on the seacoast even near Adulis. Before the harbor of that market-town, out at sea on the right hand, there lie a great many little sandy islands called Alalaei, yielding tortoise-shell, which is brought to market there by the Fish-Eaters.* ”

Adulis is the present port of Massowa in Eritrea at the mouth of the Bay of Adulis. It was a colony of Ptolemy Philadelphus and an important port for goods from Abyssinia and Sudan. Coloe, at an elevation of 7,000 feet, was a preferable habitat due to its cool temperatures. The site covered many acres and is dotted with temple ruins in the Greek Ptolemaic style. Ivory was recorded as a commercial article in Egypt as early as the Sixth Dynasty (2600 B C); it was used as tribute to rulers of Arabia, Kush, Cyprus, and Syria. Articles made of ivory included chairs, tables, chests, statues and whips. King Solomon's throne was made of ivory overlaid with gold. His navy brought him ivory, gold, silver, apes, and peacocks every three years. Auxum refers to Axum, the ancient capital of Abyssinia.



§ 5 “*And about eight hundred stadia beyond there is another very deep bay, with a great mound of sand piled up at the right of the entrance; at the bottom of which the opsiian stone is found, and there is the only place where it is produced. These places, from the Calf-Eaters to the other Berber country,*

are governed by Zoscales who is miserly in his ways and is always striving for more, but otherwise upright, and acquainted with Greek literature.”

The opsin stone is identified with Hauakil Bay, north of Ras Hanfilah. Pliny described this stone, still used today for jewelry, statues and votive offerings, as very dark, sometimes transparent but dull, and reflective of shadows. It is similar to obsidian. *Zoscales* refers to an Abyssinian dynasty.



§ 20 *“Directly below this place is the adjoining country of Arabia, in its length bordering a great distance on the Erythraean Sea. Different tribes inhabit the country, differing in their speech, some partially, and some altogether. The land next to the sea is similarly dotted here and there with the caves of the Fish-Eaters, but the country inland is peopled by rascally men speaking two languages, who live in villages and nomadic camps, by whom those sailing off the middle course are plundered, and those surviving shipwrecks are taken for slaves. And so they too are continually taken prisoners by the chiefs and kings of Arabia; and they are called Carnaites. Navigation is dangerous along this whole coast of Arabia, which is without harbors, with bad anchorages, foul, and inaccessible because of breakers and rocks, and terrible in every way. Therefore we hold our course down the middle of the gulf and pass on as fast as possible by the country of Arabia until we come to the Burnt Island; directly below which there are regions of peaceful people, nomadic, pasturers of cattle, sheep and camels.”*

The entire Arabian Peninsula is referred to in this passage and the “rascally men” likely describes the Bedouin tribes. Other contemporary writers mention the regular system of robbery but also describe the continual state of famine which afflicts three fourths of the population. The Burnt Island probably refers to a volcanic island of Jebel Tair.



§ 21 *“Beyond these places, in a bay at the foot of the left side of this gulf, there is a place by the shore called Muza, a market-town established by law, distant altogether from Berenice for those sailing southward, about twelve thousand stadia. And the whole place is crowded with Arab shipowners and seafaring men, and is busy with the affairs of commerce; for they carry on a trade with the farside coast and with Barygaza, sending their own ships there.”*

Muza relates to the modern city of Mocha; there was an inland market town. The actual distance was closer to 800 stadia (or miles). Because there were no accurate measuring devices, distances were estimated. Roman ships were in competition with local traders and were not welcome at this port. They had to pay dearly in the form of gifts to rulers for permission to trade here.

§ 24 *“The market-town of Muza is without a harbor, but has a good roadstead and anchorage because of the sandy bottom thereabouts, where the anchors hold safely. The merchandise imported there consists of purple cloths, both fine and coarse; clothing in the Arabian style, with sleeves; plain, ordinary, embroidered, or interwoven with gold; saffron, sweet rush, muslins, cloaks, blankets (not many), some plain and others made in the local fashion; sashes of different colors, fragrant ointments in moderate quantity, wine and wheat, not much. For the country produces grain in moderate amount, and a great deal of wine. And to the King and the Chief are given horse and sumpter-mules, vessels of gold and polished silver, finely woven clothing and copper vessels... The voyage to this place is best made about the month of September, that is Thoth, but there is nothing to prevent it even earlier.”*

Saffron (the stamens and pistils of the flower) were used medicinally, as dyes, seasonings, as a perfume, and in ointments. Halls, theaters and courts were strewn with saffron; spiritual texts were scented with saffron extract. Generally kept in horn boxes, Pliny described its use to disperse inflammations and ulcerations. Sweet rush (kyperos) was confused by the Roman writers. It may refer to an herb or possibly to nard or even papyrus. The latter was used for boat-building, sails, mats, coverlets and ropes. The roots were even used for fuel. In this instance, the reference is for an aromatic and the origin was likely the Far East.



§ 29 *“Beyond Cana, the land receding greatly, there follows a very deep bay stretching a great way across, which is called Sachalites; and the Frankincense Country, mountainous and forbidding, wrapped in thick clouds and fog, and yielding frankincense from the trees. These incense-bearing trees are not of great height or thickness; they bear the frankincense sticking in drops on the bark, just as the trees among us in Egypt weep their gum. The frankincense is gathered by the king’s slaves and those who are sent to this service for punishment. For these places are unhealthy, and pestilential even to those sailing along the coast; but almost always fatal to those working there, who perish often from want of food.”*

The barren area associated with present-day Oman has no cultivation. The people subsist on their camels and goats. Frankincense is imported from the interior. The dangers of the coast were actual: malaria, dysentery and scorching sun. Such reports were spread by early sea traders to their advantage to discourage competition. Frankincense has been a precious article of commerce since earliest times. Egyptian dynasties record the trade in the resin from Punt, referring to the place as the “Incense Lands.” It was equally valued by the Persians. Herodotus records that 1000 talents worth of frankincense was brought as tribute by the Arabs to Darius; Alexander the Great sent 500 talents worth of incense to his tutor Leonidas. The “three wise men from the East” brought gold, frankincense and myrrh to the infant Savior at Bethlehem. Pliny describes in great detail how the resin is produced from incisions made in the trees during the hottest season. The oozing sap gradually thickens and is gathered on reed mats as it hardens. Once collected, it is carried on the backs of camels to Sabota where a single gate is left open for its admission. Priests take one tenth for the honor of the state god, Sabis; further amounts are allotted to the priests, to officials for government costs and to gatekeepers. What remains goes for export. There were beliefs that tapping the frankincense tree had special dangers because the tree was thought to have divine powers.



§ 30 “On this bay there is a very great promontory facing the east, called Syagrus; on which is a fort for the defense of the country, and a harbor and store house where the frankincense is collected; and opposite this cape, well out at sea, there is an island, lying between it and the Cape of Spices opposite, but nearer Syagrus; it is called Dioscorida, and is very large but desert and marshy, having rivers in it and crocodiles and many snakes and great lizards, of which the flesh is eaten and the fat melted and used instead of olive oil. The island yields no fruit, neither vine nor grain. The inhabitants are few and they live on the coast toward the north... They are foreigners, a mixture of Arabs, Indians, and Greeks, who have emigrated to carry on trade there. The island produces the true sea-tortoise, and the land-tortoise, and the white tortoise which is very numerous and preferred for its large shells; and the mountain-tortoise, which is largest of all and has the thickest shell; of which the worthless specimens cannot be cut apart on the underside, because they are even too hard; but those of value are cut apart and the shells made whole into caskets and small plates and cake-dishes and that sort of ware.”

Dioscordia means “the Island of the Blest” and was a stopping place between Arabia and India. It is the farthest point thought to be reached by Gilgamesh in his wandering search for everlasting life. The great lizards refer to a species from Africa, *Varanus niloticus*, which attain a length of five feet and are eaten by the natives and considered the equivalent of fowl. It is uncertain which type of tortoise

the passage refers to. The reference to many snakes is significant, because the Greeks and Romans believed that snakes were the embodiment of the deceased. These beliefs added to the uneasiness that sailors felt along these coasts.



§ 38 “Beyond this region, the continent making a wide curve from the east across the depths of the bays, there follows the coast district of Scythia, which lies above toward the north; the whole marshy; from which flows down the river Sinthus, the greatest of all the rivers that flow into the Erythraean Sea, bringing down an enormous volume of water . . . now as a sign of approach to this country to those coming from the sea, there are serpents coming forth from the depths to meet you . . . the river has seven mouths, very shallow and marshy, so that they are not navigable, except for the one in the middle; at which by the shore is the market-town, Barbaricum.”

The author refers to the Sinthus River which is the Indus River. Because he has never seen the other larger rivers of the world (the Ganges, the Brahmaputra, the Mekong, Huang He, etc.) he calls this “the greatest of all rivers.” These water snakes are still seen today in this river, but the port of Barbaricum (now Shahbandar) lies far inland due to silting.



§ 41 “Beyond the gulf of Baraca is that of Barygaza and the coast of the country of Ariaca, which is the beginning of the Kingdom of Nambanus and of all India. . . it is a fertile country, yielding wheat and rice and sesame oil and clarified butter, cotton and the Indian cloths made therefrom, of the coarser sorts. Very many cattle are pastured there, and the men are of great stature and black in color. . . In these places there remain even to the present time signs of the expedition of Alexander, such as ancient shrines, walls of forts and great wells.”

The ancient city of Barygaza was an important site of the Mauryan Empire and today is the modern city of Broach near the Gulf of Kutch. The Indian state of Gujurat is still one of the most fertile areas of India. Large numbers of horses, sheep and cattle are exported from this region to Bombay and other parts of India. The use of the term “wheat” is probably mistaken for a wild variety of rice found in the area. Other grains included wild millet and barley. Sesame oil was used in India in earliest times long before it reached the Mediterranean. The clarified butter mentioned was a likely import to the African coast where oil was not produced. The Indian method of producing *ghi* or oil from melted butter could safely survive ocean voyages for up to two years when preserved in earthen pots or leather skins. It was

a product of buffalo's milk. The interesting reference to Alexander is probably quoted by a trader who being of low caste would not distinguish between Alexander and Ashoka, but would recognize that Greek or Roman traders would be more interested in such a story than any Hindu. There is no historical evidence that Alexander came this far.



§ 46 *“For this reason entrance and departure of vessels is very dangerous to those who are inexperienced or who come to this market-town for the first time. For the rush of waters at the incoming tide is irresistible, and the anchors cannot hold against it; so that large ships are caught up by the force of it, turned broadside on through the speed of the current, and so driven on the shoals and wrecked; and smaller boats are overturned; and those that have been turned aside among the channels by the receding waters at the ebb, are left on their sides, and if not held on an even keel by props, the flood tide comes upon them suddenly and under the first head of the current they are filled with water. For there is so great force in the rush of the sea at the new moon, especially during the flood tide at night, that if you begin the entrance at the moment when the waters are still, on the instant there is borne to you at the mouth of the river, a noise like the cries of an army heard from afar; and very soon the sea itself comes rushing in over the shoals with a hoarse roar.”*



§ 49 *“There are imported into this market-town, wine, Italian preferred, also Laodicean and Arabian; copper, tin, and lead; coral and topaz; thin clothing and inferior sorts of all kinds; bright-colored girdles a cubit wide; storax, sweet clover, flint glass, realgar, antimony, gold and silver coin, on which there is a profit when exchanged for the money of the country; and ointment but not very costly and not much. And for the King there are brought into those places very costly vessels of silver, singing boys, beautiful maidens for the harem, fine wines, thin clothing of the finest weaves, and the choicest ointments. There are exported from these places spikenard, costus, bdellium, ivory, agate and carnelian, lycium, cotton cloth of all kinds, silk cloth, mallow cloth, yarn, long pepper...”*

Realgar is the red sulphide of arsenic which was used as a detergent, a corrosive and for its antiseptic properties. Antimony was a stone that ground produced a frothy medicine good for eye irritations. It was also used as the main ingredient in *kohl*, the eyeliner used by women in Egypt and Persia. Gold Roman coins were of

superior value to the Indian coins which were of a crude bronze or lead. Mallow cloth was made by East Africans and was coarse and dyed blue (by means of the hibiscus flower). Long pepper is native to the hotter parts of India and refers to black pepper.



§ 50 “*Beyond Barygaza . . . the inland country back from the coast toward the east comprises many desert regions and great mountains; and all kinds of wild beasts -- leopards, tigers, elephants, enormous serpents, hyenas, and baboons of many sorts; and many populous nations, as far as the Ganges.*”

If this is accurate, then India at this time (50 AD) was the world’s most populous region. It was a highly organized and industrialized commercial center.



§ 53 – 56 “*... and then Muziris and Nelcynda, which are now of leading importance. Tyndis is of the Kingdom of Cerobothra; it is a village in plain sight by the sea. Muziris, of the same Kingdom, abounds in ships sent there with cargoes from Arabia, and by the Greeks . . . They send large ships to these market towns on account of the great quantity and bulk of pepper and malabathrum. There are imported here, in the first place, a great quantity of coin; topaz, thin clothing, not much; figured linens, antimony, coral, crude glass, copper, tin, lead; wine, not much, but as much as at Barygaza; realgar and orpiment; and wheat enough for the sailors, for this is not dealt in by the merchants there. There is exported pepper, which is produced in quantity in only one region near these markets called Cottonara. Besides this there are exported great quantities of fine pearls, ivory, silk cloth, spikenard from the Ganges, malabathrum from the places in the interior, transparent stones of all kinds, diamonds and sapphires, and tortoise-shell; that from Chryse Island, and that taken among the islands along the coast of Damirica. They make the voyage to this place in a favorable season who set out from Egypt about the month of July, that is Epiphi.*”

Tyndis may refer to modern Ponnani near modern Goa. Pirates were a danger here, but the river was a natural terminus for the pepper produced in the region. Muziris later became a major port in medieval times. Throughout its history there has been a significant Jewish population which migrated there beginning in the first century AD. The reference to the great number of ships coincides with Hippalus’ discovery of the trade winds. Vastly greater numbers of ships from all regions frequented India’s coastal ports according to Pliny and Megasthenes. Newer ships were built with prows at both ends so that there was no need to turn around in the narrow

channels. Tonnage of typical vessels was about 33 tons. Pepper was not commonly used in the Mediterranean (except as a medicine) until Roman times. A far greater demand existed for pepper in Babylonia, Persia, India and China. Once the Persian Empire was by sea. The profits at the time of the Roman Empire were unheard-of and pepper soon became the most significant cargo, sometime three-quarters of the cargo on westward-bound ships. Malabathrum and spikenard were two of the most treasured ingredients in the ointments and perfumes of the Roman Empire. Though malabathrum leaves were from the same variety of tree as cinnamon, the Romans were unaware that cinnamon came from India. It was shipped to ports in Africa and Arab traders kept their source secret for centuries. The source of the malabathrum was openly known.



§ 62 *“About these places is the region of Masalia stretching a great way along the coast before the inland country; a great quantity of muslins is made there. Beyond this region, sailing toward the east and crossing the adjacent bay, there is the region of Dosarene, yielding the ivory known as Dosarenic. Beyond this, the course trending toward the north, there are many barbarous tribes, among whom are the Cirrhadae, a race of men with flattened noses, very savage; another tribe, the Bargysi; and the Horse-faces and the Long-faces, who are said to be cannibals.”*

The description of the Cirrhadae likely refers to the Bhota tribe whose descendants live west of Sikkim in modern Bhutan. They were warlike and polygamous and their animist religion was held in contempt by Hindus and Buddhists at the time. Their Mongolian features account for this exaggerated description of their features. Early descriptions by Herodotus and Tibullus mention certain cannibalistic practices by nomadic Indians in the east known as Pandaeans



§ 63 *“After these the course turns toward the east again, and sailing with the ocean to the right and the shore remaining beyond to the left, Ganges comes into view, and near it the very last land toward the east, Chryse. There is a river near it called the Ganges, and it rises and falls in the same way as the Nile. On its bank is a market town which has the same name as the river, Ganges. Through this place are brought malabathrum and Gangetic spikenard and pearls, and muslins of the finest sorts, which are called Gangetic. It is said that there are gold mines near these places, and there is a gold coin which is called “caltis.” And just opposite this river there is an island in the ocean, the last part of the inhabited world toward the east, under the rising sun itself; it is called Chryse; and it has the best tortoise-shell of all the places on the Erythraean Sea.”*

The cotton industry in India at this time was far advanced of anything in western countries. The history of spinning dates from ancient antiquity and was native to India. Aryan settlers found the industry well-established; the weaving of woolen cloth is referred to in the Vedas. The term “Chryse” means “golden” and surely refers to the Malacca peninsula where immense gold mines of ancient times were discovered. As early as the 4th Century, BC, Chinese ships frequented this peninsula and perhaps came much earlier. The knowledge of a place called “Chryse,” (though conceived at the time as an island south of a place called Thina) shows an advance in knowledge. It is regarded as a real place and not a mythical fairyland. Mention of Thina implies trade in this region with places in the Far East.



§ 64 *“After this region under the very north, the sea outside ending in a land called This, there is a very great inland city called Thinae, from which raw silk and silk cloth are brought on foot through Bactria to Barygaza, and are also exported to Damirica by way of the river Ganges. But the land of This is not easy of access; few men come from there, and seldom. The country lies under the Lesser Bear, and is said to border on the farthest parts of Pontus and the Caspian Sea, next to which lies Lake Maeotis; all of which empty into the ocean.”*



§ 65 *“Every year on the borders of the land of This there comes together a tribe of men with short bodies and broad, flat faces, and by nature peaceable; they are called Besatae, and are almost entirely uncivilized. They come with their wives and children, carrying great packs and plaited baskets of what looks like green grape-leaves. They meet in a place between their own country and the land of This. There they hold a feast for several days, spreading out the baskets under themselves as mats, and then return to their own places in the interior. And then the natives watching them come into that place and gather up their mats; and they pick out from the braids the fibers which they call “petri.” They lay the leaves closely together in several layers and make them into balls, which they pierce with the fibers from the mats. And there are three sorts; those made of the largest leaves are called the large-ball malabathrum; those of the smaller, the medium-ball; and those of the smallest, the small-ball. Thus there exist three sorts of malabathrum, and it is brought into India by those who prepare it.”*



§ 66 “The regions beyond these places are either difficult of access because of their excessive winters and great cold, or else cannot be sought out because of some divine influence of the gods.”

This passage must refer to the impassable Himalayas and the region beyond Sikkim. The author must be aware of the beliefs of the Hindus, as told in their sacred *Vedas*, *Brahmanas* and the *Mahabharata*, which refer to Mount Everest (in the name of Gaurisankar) as the home of Shiva and Durga. These mountains (including sacred Mount Kailas) were the equivalent of Mount Olympus. Most interesting is the end of the *Periplus* which echoes the ending of the quest for Sita in the Ramayana:

“Halt not till you reach the country where the northern Kurus rest,
Utmost confines of the wide earth, home of Gods and Spirits blest!”

Notes on the Passages

PERIPLUS - the name applied to a class of writings in Roman times which was a combination sailing chart and traveler’s handbook. It translates as “guidebook.”

ERYTHRAEAN SEA - the term applied by Greek and Roman geographers to the Indian Ocean, the Red Sea and the Persian Gulf. Although *Erythra* means “red,” historical records indicate that Erythraean translates as “the Sea of King Erythras” of a Persian legend.

SAILING - The types of ships referred to in the *Periplus* were quite similar to those depicted in Egyptian reliefs of the Punt Expedition in the Dier-el-Bahri temple at Thebes. “By the first century AD, the single square sail, with two yards, each much longer than the height of the sail . . . had been modified by omitting the lower yard and by increasing the height of the mast; while the triangular topsail had come into use. The navigation of the Indian Ocean depended on the tradewinds, and voyages were timed to make use of the seasonal changes enabling the ships to run before the wind in either direction. A steersman plied the tiller from a station high in the stern overlooking the entire vessel. Sailors used the rudder and shifted the yard to reach a destination slightly to the south of their destinations than the straight winds made possible.” The Burmah trader shows the type of ship most likely used by Egyptian and Greek traders: “The lateen sail, as exemplified in the Arab *dhow* and the Bombay*khotia* came into use about the 4th Century BC and was used by Arab and Hindu, rather than Egyptian or Greek.”
(pp. 53-54)