# CHAPTER 27 And Then

# The Argonauts Far Within the Syrtis

away from the southern Peloponnese and toward the Libyan Sea. In a tale reminiscent of Odysseus's misfortune, the *Argo* was storm-carried for nine days and nine nights. Eventually the vessel was driven far within the Syrtis, a region which I describe in the previous chapter.

Relaying the legend as it was told to him, Herodotus says that the *Argo* was driven into shallow, shoal-abundant waters of the Syrtis. The shoals were situated so far seaward of the main coastline that the *Argo* was hopelessly among them before Jason caught sight of land. Herodotus identifies the place of stranding as Lake Tritonis.

According to the Greek poet Pindar (fifth century BC) and Hellenistic Egyptian **mythographer** Apollonius Rhodius (third century BC), the *Argo* was storm-driven into shallow coastal waters, but not into Lake Tritonis. In a futile attempt to find a navigable path back to the open sea, the Argonauts portaged for twelve days. Ultimately the exhausted sailors stopped at the lagoon of Lake Tritonis.

Regardless of whether a portage was involved, the *Argo* initially was grounded by a local combination of sea conditions and landforms. Apollonius Rhodius says that on frequent occasions, the Syrtic flood tide at the Libyan shore retreated from the land and then burst back again over the beach, coming on with a rush and a roar. Apollonius explains that such a surge carried the *Argo* over the vast sea of shoals that extended far out from shore.

Under normal sea-surface conditions, a vessel would have been stranded or destroyed on the shoals long before it reached the mainland. But the flood

tide bore the *Argo* high onto the land from the deep sea, suddenly thrusting the vessel onto what Apollonius calls the "innermost shore." Then the tide rushed back to the sea, leaving a skim of foam over the tidal flats.

Whereas tempest-winds carried the *Argo* from southern Greece to Libya, the lack of wind threatened to doom the sailors once they were stranded on the arid Libyan coast. Apollonius Rhodius says that the entire scene was possessed by a dead calm. The barren coastal location contained no freshwater, no path, no signs of human presence, and no animals that creep or fly.

#### WHEN NORTH WINDS BLOW

For reasons given in this chapter and the next chapter, I consider it unlikely that a gale would have driven the *Argo* from the southern Peloponnese all the way westward to Tunisia's Gulf of Gabes. Instead, I see a combination of shifting stormwinds and associated currents carrying the *Argo* across the Libyan Sea to the southeastern Gulf of Sirt in ancient Cyrenaica. I do not restrictively interpret nine days as nine days of straight-line travel. Perhaps variable winds buffeted the vessel back and forth in an expanse of water that could have been crossed in a fraction of the time if winds had been steady.

Before the Archaic Greeks became reasonably informed about western Carthaginian geography, they probably would have fostered myths set in Egypt and Hellenic Cyrenian territory. In my opinion, some of the early mythographical references to the Lesser Syrtis might be indicating the head of the Gulf of Sirt, or perhaps the Bight of Brega, rather than the Gulf of Gabes (Figure 7). In ancient times, this bight may have had dimensions far different than today.

Regardless of the *Argo*'s exact position in the Gulf of Sirt, a massive incursion of seawater inundated coastal lands. Lagoons that normally were separated from the sea by natural barriers were flooded by the surge. A wave abruptly carried the *Argo* inland and then left the vessel grounded in the fast-receding waters. The *Argo* came to rest on the white sands of the intertidal salt flats.

### Winds and Currents in the Gulf of Sirt

Today we know that normal water currents in the Gulf of Sirt primarily are wind-induced. Strong northerly winds can raise heavy swells in the Gulf of Sirt. Occasionally gales can extend to the head of the gulf.

In 2003 the National Imagery and Mapping Agency of the United States published a report giving sailing directions for the Eastern Mediterranean, including the coast of Libya (see Selected References). The report states that in the Gulf of Sirt, prevailing winds are from the northwest and northeast, and often raise heavy swells that pound the gulf shores. During winter, winds and currents tend to drive vessels onshore in the head of the gulf between Az Zuwaytinah (east of Marsa Brega) and Benghazi. Commercial vessels in this zone may be forced to leave port terminals because of sudden strong winds and heavy swells. At Ras Lanuf, winds up to 70 knots (130 kilometers per hour) have been recorded in recent years.

In a 1995 fisheries and aquaculture development report published by the Food and Agriculture Organization of the United Nations, the authors note that gales from the north in the Aegean may produce wave trains moving southeast to reach the coast of Egypt as a northwesterly swell (see Selected References). Along the Libyan coast, rough seas occur during sudden, violent northeasterly squalls known as *gharra*, which occur from January to March.

#### DID THE ARGO RUN AGROUND NEAR MODERN-DAY RAS LANUF?

In my reading, the coastal land initially experienced by the Argonauts was part of the Sirtica, a large wasteland desert that fronts the Gulf of Sirt for about 500 kilometers (Figure 7). If Lake Tritonis was a twelve-day portage from the site of the initial stranding, and if the portage was toward the east, then I speculate that the *Argo* initially may have grounded near the modern-day port of Ras Lanuf.

Today Ras Lanuf and the next two small ports to the east (Ras al Ali and Ras al Magdar) are low, sandy points characterized by negligible tides. These areas are fronted by shoals, reefs, and "foul ground." Some reefs are extensive. Offshore waters are shallow and may contain **rocks awash**. The barren coast from Ras Lanuf eastward to the head of the Gulf of Sirt is backed by occasional ridges.

Ras Lanuf is less than 6 kilometers northwest of the remains of the twentieth century's Marble Arch. This massive stone arch along the coast road was erected by Benito Mussolini (1883–1945) to inaugurate his Italian regime's newly conquered colonial provinces in North Africa. During and after World War II, the Marble Arch was a well-known desert landmark designating the coastal border between Tripolitania and Cyrenaica. The modern structure was intended to coincide with the

legendary monuments in ancient Arae Philaenorum. These monuments were established 2,400 years earlier to mark the ancient divide between Carthaginian and Cyrenian territory.

## Did the Portage End at the Bight of Brega?

The next section gives the mythical tale of how the Argonauts chose the direction in which to portage the *Argo*. As I see it, if the vessel initially grounded near Ras Lanuf, and if the portage was eastward, then the modern-day Bight of Brega could have been the bay to which the Argonauts prayed to be led. The ancient bight either could have formed the offshore portion of Lake Tritonis, or could have adjoined it.

Today the coastal waters of Marsa Brega (Burayqah) contain features consistent with the ancient myth. A "foul area" with many rocks awash extends offshore from the modern breakwater. Also extending offshore is a coastal bank. Several reefs, shoals, and islets lie up to almost 8 kilometers offshore between Marsa Brega and Az Zuwaytinah, which is the next major port to the east.

#### FIRST BACKSTORY: HOOFPRINTS POINT THE WAY

When the *Argo* was grounded in coastal Libya, the Argonauts and their leader Jason believed that they faced certain death from dehydration and starvation. From the beached vessel, the sailors dispersed onto the tidal flat, each finding a solitary place to grieve. The men wrapped their heads in their cloaks and lay on the sand all night and the next day, awaiting death.

On that same night, the Libyan nymphs and Medea were lamenting the death of Medusa, although some modern interpretations identify these first-encountered nymphs as the Hesperides mourning the death of Ladon. The Libyan nymphs are called by Apollonius Rhodius "the solitary ones," "Libya's warders and daughters," and "noble goddesses of the desert." If my chronology in the chart opposite is representative, these particular nymphs could not have been the Hesperides mourning the death of Ladon, because this event had not yet happened.

In any case, the gentle Libyan nymphs appeared the next day to Jason as he lay on the beach in hopeless distress. They prophesied that when Amphitrite unbridles the **hippocamps** of Poseidon's chariot, Jason should pay to his mother a recompense for her travail when she bore him so long in her womb. Once Jason's mother is paid recompense, the Argonauts can

# Interpretive Chronology of Events from Argonaut-Tritonis Myth

Day (Inclusive) Since Initial Stranding		Events of Argonaut–Tritonis Myth
-8 to 0		Northern gale strikes off southern Peloponnese and continues for nine days and nine nights
0 (day)	Perse	us kills Medusa and begins eastward flight across Libya
0 (day)		Initial stranding in Sirtica near Ras Lanuf; Argonauts disperse onto land and anticipate their deaths
0 (night)	Meded	and Libyan nymphs mourn Medusa's death
0 (night)		Argonauts individually choose their anticipated places of death; they sleep on sandy waste
1 (+)	Perseu sands	us continues eastward flight across Libya; vipers spring from Libyan
1		Libyan nymphs appear and prophecy to Jason; portage begins
1 to 12		Portage of the Argo
11		les kills Ladon near Lake Tritonis; Heracles strikes rock and creates nian spring
12		Portage ends at Lake Tritonis; three Argonauts die—one to snake- bite—during vain search for Heracles
13		Argo fails to sail out of Lake Tritonis on south wind; Argonauts propitiate local gods; Triton appears and guides them to open sea
13 (late d all night)	ay and	Argonauts drop anchor and remain onshore to honor gods
14 (dawn)	)	Argonauts depart the harbor of rescue, heading north under a west wind
15 (dawn)	)	Argonauts see the Cyrenaican headland curve sharply east; they sail straight on
16 (all day	y and	Argonauts row the Argo when the wind ceases
17		Argonauts are within sight of Carpathus (near Crete)
17?		Medea defeats Talus; Argonauts spend night on Crete
18		Argonauts sail Sea of Crete, encounter a pall of darkness, and spend night on Anaphi
19		Euphemus casts the clod gifted by Triton; Calliste (Thera) years later rises up from sea

return to the Peloponnese. After delivering this message, the nymphs cloaked themselves in a mist, vanishing where they stood and once again becoming hidden from Jason's sight.

Jason immediately summoned his comrades. The sailors gathered near the stranded *Argo*, where they listened to their leader recount his experience with the nymphs.

As they stood along the beach, "the strangest of portents" was wrought. The Argonauts saw a monstrous horse of great size come bounding out of the sea and onto the land, his golden mane tossing round his neck. From his limbs the animal shook off abundant spray. Then with feet like the wind, the horse galloped away, leaving hoofprints along the sandy shoreline.

Jason interpreted the event as a fulfillment of the nymphic prophecy. He perceived the horse to be one of Poseidon's hippocamps unyoked. Because the nymphs had not indicated whether they meant Jason's human mother, Gaia (Earth), or the *Argo*, Jason interpreted "mother" as the *Argo*, which had borne him and his shipmates with grievous travail.

Jason concluded that, in like recompense, the Argonauts will carry the motherly *Argo* across the "country of sandy wastes." Jason reasoned that by following the hoofprints of the watery steed, the Argonauts will be led to a navigable bay connected to the open sea. The Argonauts agreed with his interpretation, and they eagerly began their portage that ultimately ended at Lake Tritonis.

# Interpreting the Horse

The ancient Greeks routinely used horses as metaphors for thunder and for fast movements of air, clouds, rain, and water. As I see it, the image of a giant horse that quickly appears in the waves, crashes obliquely onto shore, and dissipates along the shoreline is a mythical way of describing a natural phenomenon.

The horse appeared the day after the initial stranding. The day of the stranding was a dead calm with no wind: presumably the next day was similar. If so, it is unlikely that high winds on the coastal sea would have been responsible for the sudden, isolated high wave.

In my opinion, it is plausible that the wave was a so-called "sneaker wave." Alternately, the wave could have been either a sea-surface seiche, the remnant of a **tsunami** caused by undersea earthquake activity, or an orphan tsunami, which is a giant tsunami wave not linked to a local earthquake. A submarine earthquake may not have been felt by the Argonauts

as they wandered along the seashore, but such a quake may have been sufficient to generate a small offshore tsunami with just enough energy to send a single large wave crashing onto the beach.

*Sneaker Waves*. A sneaker wave is a disproportionately large coastal wave that suddenly appears in a wave train. Sneaker waves form when the energy of smaller waves becomes focused; consequently, a sneaker wave is much larger than preceding waves.

Sneaker waves often are mistakenly called rogue waves, a term which refers to waves far out in the ocean. Rogue waves or freak waves on the high seas form by processes similar to those forming coastal sneaker waves, but on a much larger scale: some freak waves tower 30 meters high. Until the late twentieth century, scientists dismissed the lore of rogue waves as mythical, but oceanographic studies have proven the waves to be a physical fact.

Sneaker waves likewise are a natural occurrence. Because they appear without warning and do not follow a predictable pattern, sneaker waves can sweep unwary swimmers and beachcombers out to sea. Sneaker waves can reach levels on the beach far beyond the extent of normal waves. Hence, sneaker waves have killed many tourists and seaside residents in various coastal areas of the world. No doubt these waves have killed innumerable people since ancient times.

**Seiches.** A seiche is a standing wave in an enclosed or partially enclosed body of water. Seiches and seiche-related phenomena have been observed on lakes, reservoirs, bays, and seas. Like sneaker waves, seiches are unpredictable because the convergence of critical formative factors is unpredictable.

The most common seiche-inducing factors are high winds, sudden variations in atmospheric pressure, seismic activity, and tsunamis. Seiche waves may continue for several days after a tsunami, especially if synchronized with the tidal cycle.

For a seiche to form, the waterbody must be partially constrained to allow a standing wave to be generated. Regularity of coastline geometry is not required, as proven by routine oscillations observed in harbors with exceedingly irregular shapes.

Some seiches can be large and disastrous. In 1954 a 3-meter, squall-induced freshwater seiche on Lake Michigan hit the Chicago waterfront, drowning eight fishermen. In Hilo Bay, Hawaii, seawater seiches triggered by the 1946 tsunami reached a height of 14 meters and killed 159 people.

In Europe, seiches caused by low atmospheric pressure have caused flooding in Italy's Venice Lagoon and in Saint Petersburg, Russia's Neva Bay where the Neva River empties into the Baltic Sea.

A sea-surface seiche in ancient coastal Libya could have occurred in any number of bays or **wadi** deltas, with or without the associated environmental drama of a major earthquake or major tsunami. However, the legendary events of Heracles' kick, the resulting cleft, and the emergence of a new **groundwater** flow suggest a terrestrial earthquake that opened a subterranean vein of freshwater along the karstic coast (see *Third Backstory*). Perhaps an offshore quake yielded a seiche that struck the beach where Jason and the Argonauts were gathered.

# SECOND BACKSTORY: THIRSTY SAILORS NEAR THE GARDEN OF THE HESPERIDES

After their twelve-day portage, the Argonauts were parched and frantic to find water on the arid coastal plain. Presumably they had exhausted any freshwater in containers stowed in the *Argo*. Although springs and flowing wadis might have existed during the rainy winter season, the Argonauts on that day were unsuccessful in finding a supply. The waters of Lake Tritonis were all around but were too salty to drink. Apollonius Rhodius says that the Argonauts rushed like raging hounds to search for a spring.

When the water-seeking Argonauts reached the Garden of the Hesperides, they saw Ladon, the former watch-serpent, in the throes of death. On the previous day, Heracles had mortally wounded Ladon with arrows poisoned in the "bitter gall of the Lernaean Hydra" (Chapter 17).

On this voyage, the legendary Thracian poet-musician Orpheus was traveling with the Argonauts. As he and the Argonauts approached the garden, Orpheus recognized the nearby presence of the Hesperides, who were shrilly lamenting Ladon's demise. Startled by the sailors, the nymphs became dust and earth where they stood. Orpheus prayerfully appealed to the disguised nymphs to help save the stranded sailors from dying of dehydration. The nymphs took pity on the suffering Argonauts and chose to reveal themselves as vegetation.

In Apollonius's words: "First grass sprung up from the ground, then long shoots appeared above the grass, and in a moment three saplings, tall, straight and in full leaf, were growing there. Hespere (Hesperia) became a poplar; Erytheia (Erytheis) an elm; Aegle a sacred willow. Yet they were

still themselves: the trees could not conceal their former shapes. That was the greatest wonder of all."

In the form of a willow, Aegle spoke and pointed to the rock near Lake Tritonis that the hero Heracles had kicked on the previous day, forming a spring (see *Third Backstory*). Her helpful direction led the sailors to the spring and thereby saved them.

## The Hesperidian Garden Oasis

To me, the Garden of the Hesperides described by Apollonius Rhodius sounds like an oasis, which is an area in a desert made fertile by the availability of groundwater. In some oases, groundwater is near the land surface but does not rise above it. In other oases, groundwater reaches above the land surface to form springs and pools.

Some oases are little more than small springs surrounded by date palms. Other oases are spacious, and a few form entire geopolitical provinces. Oases were historically important stopping points for caravans. Agriculture in Libya's present-day oases is dominated by date palms, but a variety of crops are grown.

In the fifth century BC, Herodotus mentioned oases with their patches of verdure extending east to west across Libya. If the climate of classical antiquity was wetter than today, as many scientists attest, then groundwater levels would have been higher and oases would have been abundant.

The story of the Hesperides transforming into a vegetated oasis is consistent with plant biology. If water is available to moisten seeds or dormant underground stems, vegetation can sprout where none previously existed. The growth rate of vegetation can be rapid because of the hot climate, abundant sunshine, and the availability of groundwater to plant roots.

Regarding the willow tree "speaking" to the Argonauts, the pattern of vegetation would have given the Argonauts clues to the source of water that enabled the growth. By their presence alone, green plants in dry regions "point" the way to water, just as the myth states.

# Is the Garden a Terrestrial Karst Gulf in Cyrenaica?

Apollonius Rhodius refers to "the sacred plain" in which the Garden of the Hesperides was located. Aegle, one of the Hesperides, indicated that water was nowhere to be seen on this plain. Aegle's statement is consistent with karst terrain, wherein surface waters typically are absent, but groundwaters exist unseen below the land surface, except where humans might witness waters in karst caves and potholes. Perhaps the plain of the Hesperides was a karst plain.

In my reading, the Garden of the Hesperides was inspired by an actual patch of verdure along an arid or semi-arid karstic coastal plain. Pseudo-Scylax mentions "very many gardens" on the Cyrenaican headland. He names a Garden of the Hesperides inland from Phycus and Barce. The Hesperidian garden is 33 meters deep, sheer in a circle, 384 meters in diameter, and shaded with thickets of fruit-bearing trees.

In his *Pythian Ode* (fifth century BC), Greek lyric poet Pindar mentions that Apollo abducted Cyrene to a "choice garden of Great Zeus" and set her to rule over a city of the same name. Pindar describes the location of Cyrene as being where a high hill crowns the plain, and where the portion of land yields all manner of rich fruits and beasts.

Deep circular potholes or "sinkings" are common on the modern Jebel Akhdar (Figure 7), which is the elevated plateau region of the Cyrenaican headland. For example, a 1959 British report from Cambridge University cites one spectacular Cyrenaican pothole north of Labraq known as Black Well (see Selected References). In 1959 this collapse crater was at least 50 meters in diameter and 200 meters deep. Another large pothole explored in 1959 was known as the Garden of Eden. Its large oval crater was 100 meters in diameter and 70 meters deep, with a cave entrance near the bottom.

These types of deep potholes typically are hydrologically connected to water-bearing horizons, or once were connected. Potholes near the shore also can possess subterranean connections to the sea. According to the 1959 report, saline lakes in the coastal plain 12 kilometers west of Marsa Susah had lakebeds below present sea level. Investigators reported some underground connection to the sea and a continuous inflow of groundwater. More recent hydrological data are not available. (See Chapter 21 for a brief description of karst in Cyrenaica.)

As I see it, Cyrenaican–Sirtian karst played a role in creating an idyllic setting in ancient coastal Libya. To me, the Garden of the Hesperides described by Pseudo-Scylax sounds like a large terrestrial karst gulf, which is a flat-bottomed collapse feature of significant size. Karst gulfs are known for supporting vegetation on their alluviated floors owing to the rich soils and available groundwater. To the nonspecialist, a karst gulf looks similar to a small valley.

Interestingly, a U.S. National Natural Landmark in Indiana called Wesley Chapel Gulf is roughly comparable in size to the Garden of the Hesperides described by Pseudo-Scylax. The American landmark is 107 meters by 328 meters in diameter, and possesses gulf walls from 8 to 29 meters high. Although Wesley Chapel Gulf is in a distinctly different ecozone than coastal Libya, it provides a non-Mediterranean analog for understanding this type of karst structure.

#### LOCATING THE GARDEN OF THE HESPERIDES

The word "Hesperides" means "of the evening." It is the collective name for at least three clear-voiced nymphs who, according to Hesiod, are the daughters of Nyx, the goddess of Night. In the first century BC, Diodorus Siculus writes that the Hesperides' father is the Titan Atlas, and their mother is a nymph called Hesperis (Evening). Other ancient mythographers and scholiasts mention other parental possibilities.

In all accounts, the Hesperides are associated with evening and the golden glow of sunset. A Greek lyric poet in perhaps the seventh century BC says that the nymphs live on the island of the gods in homes built of solid gold. (Or so it seems when the setting sun washes everything in a golden light.)

According to Hesiod, the Hesperides live beyond or across the glorious stream of the Earth-encircling River Ocean. Hesiod identifies "the frontier land towards Nyx (Night)" but does not give an exact geographic location because the far western land to which he referred was largely unknown.

For reasons explained elsewhere in this chapter and the next one, I think that Hesiod's frontier probably was the unsettled region of Cyrenaica that within a few centuries would become the western parts of the region later known by the Ptolemies as Greek Pentapolis. In subsequent centuries, Roman reinterpreters of the myth moved "the frontier land" farther west, away from Cyrenaica and into the western extremities of former Carthaginian territory.

Commentators influenced by some Roman-era accounts place the Garden of the Hesperides in Morocco near the Strait of Gibraltar, whereas others associate the Hesperides with modern Cadiz, Spain. They rely on Strabo's single mention of a locale in ancient Cadiz called Erytheia, which coincides with the name of one of the Hesperidean nymphs.

Borrowing this logic, I might choose to champion the coastal plain and coastal plateaus near modern Benghazi, a city whose locale once was known

as Euesperides or Hesperides. In the fourth century BC, Pseudo-Scylax situated the Garden of the Hesperides slightly inland from the western coast of the Cyrenaican headland and near the city of Euesperides (Berenice), which in turn is located along a river called Ecchius. In the second century AD, the Hellenistic geographer Ptolemy also placed the garden in the western Pentapolis near the Barca plateau. Some Roman maps show a Tritonis Lake and a River Lathon in the same proximity.

When Euesperides declined and was eventually refounded by the Ptolemies and renamed Berenice (also called Barneek), the successor settlement was relocated about 3 kilometers closer to the coast and adjacent to the mouth of a chain of coastal lagoons that provided a harbor and access to the Mediterranean. As I see it, so-called "gardens" could have been situated near the shore of one of the lagoons, in low-lying areas of the nearby coastal plain, and on the adjacent limestone plateaus. Today the Benghazi vicinity includes a complex of small freshwater lakes and a spring-fed lagoon.

If the ancient word "garden" denoted a naturally lush area amidst an otherwise dry environment, then any Mediterranean garden in an uncolonized land west of Greek settlements could have been portrayed by Archaic Greek storytellers as the Garden of the Hesperides. Any one garden among many gardens could have been identified as the single, definitive garden of legend.

# **Geography Lesson**

Place names alone are of limited value for theorizing ancient locations, simply because multiple rivers, wells, springs, cities, and other named features can share the same name or a variation thereof. In my opinion, there is great utility in considering the state of ancient geographical knowledge among the average Greeks.

Geographical knowledge acquired by travelers and traders was not widely disseminated among the Archaic Greek populace, including the poets and mythographers. Homer and Hesiod knew only by report of an undefined land west of Egypt. They had no conception of its form or extent, and they gave its inhabitants the general name "Ethiopes."

In the centuries after Homer and Hesiod, Greek knowledge of the west-of-Egypt land was limited to a few coastal areas associated with Phoenician trading colonies. Even in the seventh century BC, the Greek founder of Cyrene was reputed to have not known the location of his

Libyan destination, except that it was west of Egypt. Two centuries later, Herodotus assembled geographical information based largely on reports of travelers.

The Greeks colonized Cyrenaica in the late seventh and sixth centuries BC. The western boundary of Greek Cyrenaica was roughly 40 kilometers west of the modern Libyan coastal town of Agheila (Figure 7), also called El Agheila and Al Uqaylah (Aqaylah).

Modern Agheila stands near the ancient location of the Greek frontier outpost of Automala at the southernmost point of the Gulf of Sirt in a boundary zone that the Greeks called "Arae Philaenorum." Named after two brothers (the Philaeni), the Arae Philaenorum marked the coastal boundary between the territories of Carthage and Cyrene, and later between Tripolitania and Cyrenaica. This boundary zone may have been near today's Ras Lanuf, or perhaps slightly to the east.

In my opinion, the Archaic Greeks probably meant the western boundary of ancient Greek Cyrenaica when they spoke of the Far West. I expect that Homer, Hesiod, and their Archaic-Era contemporaries would have placed the Garden of the Hesperides along the Mediterranean coast only slightly west of Egypt: namely, in ancient Cyrenaica where it borders the Gulf of Sirt. They probably envisioned the sinuous River Ocean as traversing the inland areas south of the unknown coastal desert that today is known as Sirtica.

After Greek colonization and expanding trade routes familiarized an increasing number of Greeks with Western Mediterranean geography, some knowledgeable writers could have updated narratives concerning the limits of the explored world. Once a speculative territory becomes known, the territory loses its aura of mystery and can no longer be the setting for tales of the unknown. Old stories must be reset in new locations.

Greek and Latin writers who were more geographically savvy would have edited the older myths to reflect their current states of knowledge. Later writers, particularly those influenced by the Carthaginians and Romans, placed the unknown western bound of the Earth much farther west.

#### THIRD BACKSTORY: HEROIC HERACLES GETS THIRSTY

The Greek hero and demigod Heracles created a spring when he traveled to the western land of the Hesperides. For reasons already discussed, I think that the garden as originally conceived by the Archaic Greeks was a well-watered karstic landscape on the western side of the Cyrenaican headland.

In their west-of-Egypt garden, the Hesperides tended the tree of the golden apples, which Gaia (Earth) had long ago presented to Hera as a wedding present when she married Zeus, king of the Olympians. The Hesperides were assisted by Ladon, who typically is considered the monstrous serpentine son of Ceto and Phorcys (Chapter 14). Greek mythographer Apollodorus in *The Library* (second century BC) and Latin mythographer Hyginus in *Fabulae* (second century AD) say that Ladon is the child of Typhon and Echidna.

Regardless of his parentage, the hundred-headed, clear-sighted drakon known as Ladon guarded the Hesperidian apples to prevent theft. The golden apples presumably represented immortality.

Heracles was sent to fetch the Hesperidean apples as one of his twelve labors. Apollonius Rhodius in the *Argonautica* (third century BC) tells how Heracles slew Ladon and then stole the apples for himself, although the goddess Athena later made him return them.

Parched from his slaying of Ladon and finding no fresh surface water in the bleak Libyan environment, Heracles kicked the base of a rock near Lake Tritonis. His mighty kick created a cleft from which springwater gushed. The spring marks the spot in the Lake Tritonis region where the Argonauts received help from the Hesperides, as I described in a previous section.

# Springs in Coastal Syrtis

To me, Heracles' kick represents an earthquake, perhaps merely a tremor, that opened a new conduit of groundwater flow to the land surface. The image of a kick or a blow followed by a flow of water is found in the Hebrew Bible and other ancient texts. I consider Poseidon's trident strike and the hoof-strikes of Pegasus also to represent earthquake-induced issuances.

As I discuss in Chapters 11 through 13, springs in the ancient Greek world tended to occur in karst environments. The southeastern Gulf of Sirt and the Cyrenaican headland are characterized by karst. Perhaps an earthquake opened a new passage that enabled previously unavailable subterranean water to be delivered to the ground surface through a karstic conduit.

Although deep subterranean reserves of water would have had no direct

relevance to the Argonauts' coastal search for surface springwater, the presence of fossil groundwater deep under the ground makes an interesting sidenote. In 1953 Libyan oil prospectors discovered huge subterranean water reservoirs hundreds of meters beneath the Libyan desert. In 1976 a project called the Great Manmade River was initiated, and in the 1980s the first huge pipelines started delivering this fossil water to northern areas along the Sirtian coast. By 1996 pipelines snaked their way to cities such as Benghazi, Sirt, and Tripoli. Because the fossil water is not replenished, the supply could be exhausted in either a few decades or a few generations, depending on the pumping rate.

## Thanks, Heracles

As described previously under *Second Backstory*, the Hesperidean vegetation allowed the Argonauts to discover a desert spring issuing from a rifted rock near Lake Tritonis. This spring was created the previous day by Heracles' mighty kick.

Once their thirst was quenched at Heracles' spring, the Argonauts hoped to find him and express their gratitude. Five sailors dispersed in search of the hero. After a vain toil, four returned.

Canthus, the fifth searcher, met a deadly fate. Whereas the site of the *Argo*'s initial stranding was devoid of human activity, the region around Lake Tritonis was characterized by some agriculture and animal husbandry. The large island Hisperia, for example, was said to contain many fruit trees and flocks of sheep.

Canthus discovered a pasturing flock of sheep and attempted to lead them back to the *Argo*. In defense of his sheep, the strong shepherd cast a stone, killing Canthus. In revenge, the Argonauts plundered the sheep, taking them aboard the *Argo*.

On the same day, the Argonaut named Mopsus stepped on a serpent and suffered a venomous bite. Apollonius Rhodius makes the connections among Perseus's slaying of Medusa, his post-slayage flight, the dripping blood and emerging vipers, and the type of viper that killed Mopsus.

#### THE ARGO RETURNS TO SEA (WITH HELP FROM TRITON)

After the events described in the previous sections, the Argonauts launched the *Argo* and attempted to sail out of Lake Tritonis on a south wind. But amidst all the shoals, they wandered aimlessly without finding an outlet from the lake to the sea. This description aligns with Pseudo-Scylax's

account that at ebb tide, Lake Tritonis sometimes appears "not to have a way to sail in."

On Orpheus's suggestion, the Argonauts disembarked onto a shoal and propitiated the local gods with a golden tripod that Apollo previously had given to Jason. Their intent was to induce the gods to help them on their way. The god that quickly responded was Triton, the local god of the Libyan Sea (Chapter 14).

Poseidon had ensured that his son Triton was well versed in the Libyan Sea region over which the young god ruled. Triton, who was intimately familiar with his own dominion, knew details of the currents and other peculiarities of the Libyan seaboard that were not obvious to foreign travelers. The friendly god took the form of a young man, greeted the Argonauts, and instructed them in the unique nature of the coastal sea at the place where they were seeking a navigable outlet from Lake Tritonis.

## Showing the Way

Standing with the Argonauts on a shoal in Lake Tritonis, Triton pointed across the landscape—seascape to the distant Libyan Sea and the deep mouth of Lake Tritonis. Triton then identified the narrow submarine outlet to the sea. Although this submarine passage was beneath the water surface and hidden from normal human eyesight, Triton explained that the outlet was a deep spot marked by still, dark waters. The deep spot, Triton said, was flanked by rolling white breakers that created seafoam. The foam was visible from where the Argonauts stood. Triton advised that the navigable fairway was narrow.

The Argonauts eagerly returned to the *Argo* and took up their oars, forging the ship forward. Meanwhile, Triton picked up the tripod and briefly dived beneath the water where he changed from his temporary human form back into his normal fish—man form.

Still eager to help and further propitiated by the Argonauts' shipboard sacrifice of a sheep, the fish-like Triton emerged from the water surface and seized the *Argo*'s keel, physically guiding the vessel through the lake and into the sea. Apollonius Rhodius compares Triton's action to a man guiding a willing horse into the arena. And so Triton brought the *Argo* to the open sea where he launched her on her way.

Rather than sailing immediately from the deepwater bay into which Triton had guided them, the Argonauts dropped anchor. They spent the rest of the day onshore, giving thanks to the gods. Apollonius Rhodius says that in his own lifetime, the harbor still bears the *Argo*'s name, and altars to Poseidon and Triton are evidence of the Argonauts' brief sojourn.

# **Heading Toward Home**

At dawn the next day, the south wind changed to a west wind. The *Argo* departed the deep harbor of rescue, obeying Triton's instructions by keeping the coastal desert on their right. They sailed all day, obediently hugging the coast as it ran north.

The next morning, the Argonauts saw the jutting headland and the recess of the sea curving inward (landward) beyond it, just as Triton had described. At the point on the headland where the coast fell away to the east, the Argonauts quit the coast and sailed straight on. This heading, as Triton indicated, would lead to the Sea of Crete and the Peloponnese.

On that same morning, the west wind ceased and a clear south wind blew all day, carrying the *Argo* northward from the Libyan coast. But at sunset the wind ceased, causing the Argonauts to row all night, the next day, and again the following night.

According to Apollonius Rhodius, the Argonauts soon saw rugged Carpathus (Carpathos) in the distance. Located between Crete and Rhodes, Carpathus is the second largest of the Greek Dodecanese islands (Figures 3 and 7). From Carpathus, the Argonauts proceeded toward Crete.

At first the Argonauts could not anchor on Crete because Talus, a giant of bronze, hurled rocks from the cliff down toward the *Argo*. After Medea defeated Talus in order to aid the Argonauts, the sailors spent the night in Crete. At dawn they speedily rowed over the wide Sea of Crete. But they soon encountered the "pall of darkness," which some commentators interpret as a volcanic ash cloud from a catastrophic eruption of the volcano on Thera (Santorini).

The dismayed Argonauts prayed to Apollo, who sent a golden bow of light that flashed a dazzling gleam all around. This light helped the sailors see Anaphi, a small island of the southern Cyclades located just east of Thera. On Anaphi, the Argonauts anchored for the night, and at dawn they made abundant sacrifices to Apollo.

On this clear morning, the Argonaut named Euphemus cast into the sea the clod of earth that Triton had given him in Libya as a token of friendship. True to Jason's articulation of Apollo's prophecy, the gods eventually caused an island, Calliste, to rise up from the sea. (As Apollonius Rhodius explains, this occurred after the days of Euphemus. Calliste

was "the sacred nurse" of Euphemus's descendants.) The island would later be renamed Thera after Theras, the Spartan man who brought settlers to the island in the ninth century BC.

Geologists tell us that Thera was built literally from the ground up, wherein the ground was the seabed and the building mechanism was submarine volcanism. Chapter 29 describes Thera and the one particularly violent eruption which occurred sometime between 1650 and 1450 BC.