# An Approach to the Book of Mormon Geography 

A Land Choice Above All Other Lands

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The Book of Mormon story happened somewhere. It had to have a location. But where? It is our assertion that the heartlands of the Book of Mormon peoples - the Nephites, the Lamanites, the Jaredites and the people of Mulek -were located in what is now the peninsula of Baja California.

We propose that the land of Nephi was located in the southern half of Baja California; that the land of Zarahemla and the land of Bountiful (with a small neck of land on its northern border) were in the center of the peninsula; and that the land of Desolation, occupied by both the Nephites and the Jaredites, covered the northern half of Baja California. The dimensions, scope, variety and land area of these combined regions are more than ample as a setting for events, locations and distances described in the Book of Mormon.


Satellite image of Baja California, Mexico.

A typical response to Baja California might well be: "What!" or, "Isn’t Baja California just a long sand bar south of San Diego?" Actually, Baja California is an 800 mile-long peninsula, with a delightful climate similar to California and the State of Israel. The area is nearly the size of Utah and five times the size of Israel. It is a land with a blessed physical environment of unusual variety and exciting vistas, and areas where the land narrows to some 40 miles. This striking region, isolated by the barrier of an international border, comprises two states of Mexico with a combined population exceeding that of the State of Utah, and when combined with southern California, the population totals some 23 million. And there is a good chance that the fruit and vegetables you had for lunch today were picked only days ago in Baja California.

## Our Approach to Book of Mormon Geography

We know the Book of Mormon to be a true and correct account of the Nephite and Jaredite cultures and civilizations. We also believe that the most important contribution of the Book of Mormon is not it's geography or its cultural and historical details, but its clear and masterful contributions to our understanding of gospel doctrines of salvation, correct principles of behavior, and the consequences of unrighteous choices.

Joseph Smith said concerning the Book of Mormon: "I told the brethren that the Book of Mormon was the most correct of any book on earth, . . ." We accept this statement of correctness in its most literal sense, and have focused our efforts on the numerous references in the text as accurate descriptions of geographical features. If the text says east, we should use east. If the text describes a direction as east, we should accept the direction as being correct and not try to justify a more convenient orientation, such as south, to fit a proposed geographical location. If the text says swords were made of steel, we should accept it means steel and not claim the swords were made from an alternative substance, such as obsidian, when the raw materials for making steel are not available within a desired region of the world.

The scriptures are our only official source of information on the geography of the Book of Mormon. There are no other sources beyond the Book of Mormon text, unless it is an official pronouncement of the Church. We have had to conscientiously avoid imposing any mental maps and mental images of the Book of Mormon lands as templates for its geography, or even the images portrayed in an artist's paintings of Book of Mormon
scenes, often with lakes depicting the waters of Mormon, surrounded with magnificent stone buildings and jungle foliage filled with monkeys and parrots. These images are misleading, especially when there are no lakes, jungles, monkeys, parrots or stone buildings mentioned in the Book of Mormon geography. Our approach also starts with the premise that we should first focus on the geography and then move towards contributions from other disciplines. The reverse of this approach is the proverbial "forcing a square peg into a round hole." If a proposed location for the Book of Mormon lands is not correct, not only does the detailed information not fit well,
 but the truth is often splintered in the process.

Even though we have spent our careers as a university professor of human and physical geography, a computer engineer with pioneering work on the Internet, and as computer specialists for two major projects on the text of the Book of Mormon, we never gave much concern or thought to the geography of the Nephite and Jaredite lands. From time to time, however, we read the work of others attempting to unravel the challenges faced with locating Book of Mormon lands. We held the view that many of the conclusions in these studies did not accurately reflect the numerous geographical details contained within the Book of Mormon text, especially the scale, relative location, and physical environment of Book of Mormon places. This was of little concern to us, however, because our focus was


Google Earth ${ }^{\text {TM }}$ on the more important spiritual and doctrinal contributions of the book. Locating Book of Mormon places was not a high priority.

However, with the recent introduction of new, computer-based research tools - the unbelievable potential and power of the images of the earth's surface in the Google Earth ${ }^{\text {TM }}$ Internet application and the unfathomable depth of information provided from
millions of Internet sites indexed by Google Search ${ }^{\text {TM }}$, the comprehensive search ability of the Internet version of the scriptures, and our studies of the Book of Mormon scriptures we decided to experiment with these tools, using our geographical knowledge and experience with the earth's surface, to see if it were possible to throw new light on the questions: Where were the Book of Mormon lands? And were these lands located in Baja California?

## A Choice Land Prepared by the Lord

Our focus on the area of Baja
California was not the result of a protracted investigation. It came to light, to use a scriptural phrase, in an "instant, suddenly," after pondering the Lord's statements to the Book of Mormon people that they occupied choice lands prepared by Him (1 Nephi 2:20; 2 Nephi 1:5; Jacob 5:43; Ether $1: 38,42)$. For example, the Jaredites were told that they would be


Todos Santos, Baja California, Mexico. led into a land which is "choice above all other lands of the earth." Likewise, the Lord told the Nephites that they would be "led to a land of promise; yea, even a land which I have prepared for you; yea, a land which is choice above all other lands." The Lord also said that the Nephites would be planted in a "good spot of ground; yea, even that which was choice unto me above all other parts of the land of my vineyard." Understandably, the Jaredites and the Nephites would need to be led to the same general geographical area if both were to occupy the "most choice" area. And, indeed, they did settle in the same limited geographic area but at different times, with a short overlap of space and with a short overlap of time.

## Choice Lands and the Role of Climate

With our geographical background we asked the questions: What makes a region or land choice? And where are the "most choice" regions? The climate of a region is the most
important physical factor influencing soil fertility, agriculture potential, the kinds of native plants and animals, the extent and wealth of minerals and other resources, and ultimately its population carrying capacity. Climate is based on the average and variations of weather in a part of the earth's surface over long periods of time. The climate of a location is greatly affected by its latitude, terrain, as well as nearby oceans and their currents and winds. Climates can be classified, using primarily temperature and rainfall, into some 20 or more climate types. For example, some areas are hot and wet, others are hot and dry, some are cool and wet, and still others are warm and dry.

Middle latitude temperate climates have historically been most favored for human habitation. Northern and southern hemisphere cold climates and equatorial hot climates present greater challenges to human occupancy. During the last hundred years much research and analysis has been carried out by geographers who specialize in climatology to categorize and locate the world's climates and especially to identify the causal factors that differentiate these climates.

## The Nature and Location of Mediterranean Climates

It is generally acknowledged by climatologists that the "most choice" areas of the world's surface for human habitation and agriculture are found in locations possessing Mediterranean-type climates. A Mediterranean climate (Dry Summer Subtropical or Csa and Csb in the Köppen climate classification) is differentiated by a moderate annual temperature range and a distinct wet winter season and a distinct dry summer season. These two moderate temperature seasons, with alternating wet and dry periods, allow different types of agriculture over the course of the entire year and, therefore, support an expanded variety of cultivated crops and domesticated animals, and a significant number of wild animals and native plants.


Pacific Coast, Baja California, Mexico.


Mediterranean Climates throughout the World.

The Mediterranean climate occurs in only a few spots of the earth's surface. All are located in the mid-latitudes and then only on the west side of continents because of the earth's atmospheric circulation of high pressure cells that control the temperature and precipitation patterns of Mediterranean climates. The largest area of Mediterranean climate is located around its namesake the Mediterranean Sea, the ancestral home of the Book of Mormon peoples, and an area they knew first-hand. The large water area of the Mediterranean Sea influences the surrounding land areas and increases the extent of Mediterranean climate in southern Europe and parts of northern Africa. The southern half of the state of California and northern Baja California in Mexico are the only other areas of Mediterranean climate in the northern hemisphere. In the southern hemisphere there is a small area of Mediterranean climate centered on the city of Santiago, Chile, and in limited areas around the cities of Perth and Adelaide, Australia, and on the southern tip of South Africa. Numerous statements and words throughout the Book of Mormon text appear to favor a middle-latitude setting, especially a Mediterranean climate. This parallel between the Biblical lands and the Book of Mormon lands provides an important premise and solution for several geographical features and challenges noted in the Book of Mormon text. Both
lands are declared as "promised lands," with the Biblical land described as "flowing with milk and honey."


Flowers of Baja California, Mexico.

Prodigious amounts, and an exceptional variety of agricultural products are produced in these relatively small Mediterranean climate areas during all months of the year, including the dry and wet seasons. Substantial amounts of these products are exported around the world; and, understandably, the population levels are often rather high in Mediterranean climates, because of their exceptional agricultural output. For example, if necessary, California's agricultural areas could produce enough food to support the entire population of the United States and Canada, and, not unexpectedly, the population of California exceeds any other state and is even greater than that of Canada. The small area of southern California, centered on Los Angeles and San Diego, and the adjacent area of northern Baja California, currently have a combined population exceeding 23 million. Mediterranean climates, because of their moderate temperatures and limited rainfall, are often the most-visited tourist destinations in the world. It should be noted that the larger transitional climate areas, both north and south of Mediterranean climates, also can be excellent for settlement and agricultural production, especially with sufficient water from dependable sources.

Both North America and South America contain numerous regions with good to tolerable climate areas, but it is not difficult to make the case that the "most choice above all other lands" are those regions with Mediterranean climates and the regions adjacent, both a little north and a little south, of the Mediterranean climates.

## A Localized Choice Land

In addition to the climate, in order to be designated as a "choice land," the environmental conditions considered to be "choice" need to occur within a distance of a one-day journey (some 20 miles) or, at most, a journey of three days for lesser activities. This is crucial to
prevent the spoilage of food and to reduce the time and labor to transport items long distances, especially under the constraints faced by the Book of Mormon people some 2,000 years ago or our own ancestors even in the 1800s. It is not a significant blessing to merely live on a continent that possesses choice areas unless the actual, small 20-mile portion of the continent where one lives is "choice above all other lands." Most areas of North America are livable under some conditions, such as our home in Cardston, Alberta, but do not qualify as "choice above all other lands" under any set of conditions, especially those outlined below, even though they are part of a blessed continent. Today Cardston has become a tolerable and blessed land because of plentiful natural gas for heating, modern food preserving methods and high speed transportation that allows food to be imported from all corners of the globe.

## Characteristics of a Choice Land

We concluded that nearly all of the following characteristics should be present for an area to be considered as a choice land:

- A great variety of plants and animals. Variety can be increased by altitude, latitude, and seasons and relative location to ocean and land environments. A choice environment should provide a variety of adequate food sources 12 months of the year.
- A moderate annual temperature range. Not too hot and not too cold. A temperature range is required for some crops to grow and a temperature range can increase the variety of crops that can be grown-some grow best in cooler winters and some in hotter summers.
- Two distinct seasons to provide contrasting growing environments. A dry summer and a wet winter are best much, much better than a wet summer and a dry winter.
- Proximity to rather high mountains to maximize the variety of plant and animal environments and produce


Cactus of Baja California, Mexico.
conditions for rain and snow and catchment basins.

- Access to a variety of surface and underground water sources: springs, rivers, aquifers, and oceans.
- A coastal position to take advantage of the sea and coastal environments.
- An abundance of fertile soil. The main determiner of soil fertility is climate, and the best soil occurs in climates where there is a environmental balance between precipitation and potential evaporation-this balance is only achieved within specific areas of moderate, mid-latitude humid and semi-arid climates.
- An environment that allows irrigation. Many crops are best grown under controlled irrigation conditions.
- A location with a substantial variety and abundance of minerals and other resources.

All of these environmental factors led us to Baja California as a potential location and setting for the Book of Mormon story. But how does one begin to support or confirm our impression that the Book of Mormon lands were actually located in that secluded corner of the world?

## Geographical References in the Book of Mormon

It is surprising how many geographical references are found in the Book of Mormonalmost one or more on every page. We compiled a categorized list of these items that could have some bearing, even to a small degree, on substantiating or disallowing Baja California as the actual location. Some of these items are physical in nature, such as the shape of the land and the location of rivers and mountains. Others are human creations such as buildings, roads and tents. And still others are concepts, such as the geopolitical goal of the Nephites to strategically "hem in" or enclose their Lamanite enemies within the territory towards the south.

Our goal has been to aim as high as possible, by attempting to achieve a 100 percent match of all possible physical and human items mentioned in the Book of Mormon to the physical and human landscape of Baja California. Understandably, for some items this is not feasible, but this remains the goal for those features that can be reasonably matched. If

## Physical Geography

## Landforms

Banks of Rivers
Beaches
Broken Rocks
Earthquakes
Fountains
Head of River
Hills
Isle (Peninsula)
Many Waters
Mountains
Narrow Neck of Land
Narrow Pass by the Sea
Narrow Passage
Narrow Strip of Wilderness
Plains
Pure Water
Rivers
Seams and Cracks
Seas
Seashores
Tillable Land
Valleys
Wilderness

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Climate
Dearth
Dew
Dry
East Wind
Famines
Floods
Hail
Heat of the Day
Mists of Darkness
Ocean Currents
Pestilence
Rain
Seasons of Fruit
Seasons of Grain
Tempest
Whirlwind
Plants
Barley
Corn
Fields
Figs
Forests
Garden
Grapes (Wine)
Lilies
Olives
Seeds
Thicket of Small Trees
Timber (Wood)
Vineyard
Wheat
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## Minerals

Brass
Copper
Flint
Gold
Iron
Pearls
Precious Ores
Precious Stones
Silver
Steel

## Animals

Ass

## Beasts

Bees (Honey)
Cattle (Cows)
Dogs
Elephant
Flocks
Fowls
Game
Goats
Horses
Lions
Oxen
Serpents
Sheep
Swine
Vultures
Wild Goats
Wolves

Physical Geography items found in the Book of Mormon.
an item appears not to fit, within acceptable perimeters, we would need to question or rethink our initial proposal. Our fundamental approach has always been to attempt to disprove Baja California as a possible location.

## Human Geography

## Structures

Breastwork of Timber
Buildings
Cement
Chariots
Doors
Gates
Highways
Houses
Machinery
Palace
Pickets
Prisons
Roads
Sanctuaries
Sepulchers
Ships
Synagogues
Temples
Tents
Towers
Walls

Belongings
Arrows
Axes
Bows
Cimeters
Clubs
Darts
Garments
Girdles
Javelins
Quivers
Scarlets
Silk
Slings
Swords

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Cultural
Calendar
Cardinal Directions
Engraved Stones
Gold Plates
Paper
Records
Writing
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Political / Social
Armies
Borders
Cities
Lands
Lines of Defense
Markets
Migrations
Money
Populations
Towns
Trade
Tribes
Villages
Wars

Human Geography items found in the Book of Mormon.

The possibility of correlating all feasible items is compounded by erosion of evidence over time. Many human items, such as houses, clothing and roads may simply have disappeared through the effects of deterioration by man or nature. Whereas, physical features such as a mountain, a river or a gold deposit might have suffered minimal deterioration at the hand of man or natural deterioration. This continuum of human and natural effects through time is illustrated below. The items placed towards the bottom left corner we assumed would have the least changes and those in the top right corner the most changes. We have attempted to investigate all possible physical and human items to a significant and logical degree, and have found none that would appear to create an obvious matching problem. Further investigation, however, may reveal some correlation challenges.

## Change Over Time



Geographical items and changes over time by nature and man.

There are a number of ways to provide confirmation for a Baja California location. In our research, where possible, we have used the triangulation methodology of multiple sources to verify our conclusions. This provides supportive information from several different angles. Our first priority was to attempt to match the items in the Book of Mormon which are the most obvious and the easiest to compare-the climate, the shape of the land and the location of rivers, mountains and seas. If these features provided a 100 percent correlation, then we could move on to lower levels, right down to the numerous and precise locational and physical details surrounding military battles.

## A Middle Latitude Location

The middle latitude nature of many of the geographical items found in the Book of Mormon account is one of the best means of triangulation. And, conversely, the scarcity of geographical items that might support a northern latitude location or tropical wet location.

For example, the occurrence of grapes (and wine) and figs, two annual growing seasons (a season of grain and a season of fruit, Hel. 11:17), up to three years of drought (and the accompanying famine), the growing of barley as a significant crop including its use as a medium of exchange, along with silver and gold. The occurrence of hail, insect infestation and the destructive and feared east winds is of geographic significance. This triple calamity (Mosiah 12:6, Hel. 5:12) can only occur in limited areas of the middle latitudes (such as in Baja California) where it is cold enough for hail formation (and yet warm enough for the updrafts to form that are necessary for hail formation in the upper atmosphere) and yet not too far north or south to still have destructive east winds (possibly hurricanes), and yet dry enough for insect infestation when sustained droughts leave insects with little to eat. All of these conditions have a geographical basis and point to a middle latitude location, especially one with a Mediterranean climate and its annual and distinct wet and dry seasons.

## The Ecology of Planting Seeds

A singular and unambiguous clue to location is provided in Nephi's account of his family's efforts to establish an agrarian base in their new land. When his father's family left the Jerusalem area he records that "we had gathered together all manner of seeds of every kind, both of grain of every kind, and also of the seeds of fruit of every kind" ( $1 \mathrm{Ne} .8: 1$ ). And then some ten years later when the family


Grapes in Baja California, Mexico. landed in their new location on the North American continent he stated that "we did begin to till the earth, and we began to plant seeds; yea, we did put all our seeds into the earth, which we had brought from the land of Jerusalem. And it came to pass that they did grow exceedingly; wherefore, we were blessed in abundance" (1 Ne. 18:24). Note that not only the seeds "grew exceedingly," but that "all" their seeds were planted. There was no second chance for success if the first year's crops failed. And later when Nephi and part of his extended family were forced to leave the families of Laman and Lemuel and journey many days to another location, he records "we did sow seed, and we did reap again in abundance" (2 Ne. 5:11). And some

400 years later Zeniff states that in the land of Lehi-Nephi they "began to till the ground, yea, even with all manner of seeds, with seeds of corn, and of wheat, and of barley, and with neas, and with sheum, and with seeds of all manner of fruits; and we did begin to multiply and prosper in the land" (Mosiah 9:9).

The successful planting and harvesting of transported seeds provides a little-noticed but powerful and significant clue to the Nephite location. Seeds can not just be gathered in one location and then planted anywhere in the world and be expected to "grow exceedingly." The seeds might germinate in many locations, but only when the seeds are planted in an analogous location in terms of climate and soil (and climate is a major determiner of soil fertility) will they "grow exceedingly." Plants and seeds today are


Agriculture in Baja California, Mexico.
classified according to climate zones and then sold according to the buyer's planting and climate region. Examples of this agricultural challenge can be provided from the first European settlers in New England, Australia and other world locations. These early settlers suffered famine and privation for years until they could determine by trial and error what would best grow in the climate and soil of their new land, and where best to acquire suitable seeds and plants. To prevent starvation, food from elsewhere was transported long distances and at great expense. Lehi's family did not have the benefit of trial and error or imported food. Their seeds either grew with the first planting or they didn't. There was no second chance or a secondary source of food.

In the late 1800s, when the first European settlers in Alberta, Canada, planted wheat they had brought from warmer climates, it did not grow properly. Success with wheat production came only after one wheat farmer wrote to his brother in Russia and asked him to send a small quantity of wheat seed from the Moscow area. These imported Russian seeds grew exceedingly and became the seed stock for much of the wheat grown in Alberta today. The climate of the Moscow region, of course, is an analog to the climate of the wheat growing area of Alberta. The critical story behind the mutiny on the Bounty saga
was not the mutiny of the crew, but the aborted mission of transporting bread fruit plants (and their seeds) on the ship Bounty from the tropical south Pacific island climates to areas of the same climate in the Caribbean islands. The crops of the introduced bread fruit plants were intended by the British to help eliminate wide-spread starvation. Commercial production of Kiwi fruit and Granny Smith apples started in New Zealand decades ago in growing areas classified by climatologists as Marine West Coast climates. Now seeds of these southern hemisphere plants produce these same commercial fruit products in the identical Marine West Coast climate of the State of Washington. Even today, groups espousing the theory of global warming, and fearing its consequences, are stockpiling seeds from around the world in cold storage locations in Norway, at the cost of tens of millions of dollars. By this means they hope to protect the world's seed stock and then redistribute seeds to world areas when climate change prevents the successful planting from a local inventory of seeds.

Again, it is significant to note that the climate of Baja California provides a close match to the climate of the land of Jerusalem. Thus the seeds brought by the Nephites from the land of Jerusalem would have been planted in an analogous environment where they could "grow exceedingly." If grapes, figs and barley grew well in the land of Jerusalem, they potentially would grow just as abundantly and successfully in the Nephite's new homeland of Baja California.

## Official Statements on Location

Understandably, many who propose a location for the Book of Mormon lands provide quotes from church leaders and others to support the area of their research and their beliefs. We have found the authenticity, interpretation, or authoritative origin of some of these statements to be questionable, or they appear to be merely the opinion of the writer. There are, however, a few official statements bearing on the location of Book of Mormon lands. For example, when Moroni first visited Joseph Smith on the night of September 21, 1823, he told the young prophet that "there was a book deposited, written upon gold plates, giving an account of the former inhabitants of this continent, and the source from whence they sprang" (Joseph Smith—History 1:34). Clearly, the Book of Mormon lands were located somewhere on "this continent" - the North American continent of Canada, United States, Mexico, and stretching to Central America. Later, the Lord directed through a revelation to Joseph Smith that some of the brethren should flee the land and take their
"journey into the regions westward, unto the land of Missouri, unto the borders of the Lamanites" (D\&C 54:8. See also, D\&C 19:27; 57:4 and Sections 28,30 , and 32 ). This early and earnest concern to preach the gospel to the Lamanites unmistakably had a orientation towards the western half of the continent.

Possibly the most enlightening statement is the one made by Joseph Smith in a letter to N.C. Saxton, editor of the American Revivalist and Rochester Observer, 4 January 1833. Saxton had asked Joseph Smith to write about principles of the gospel and the need for the church among the nations of the earth. As a part of his response, which he attributed to a revelation from the Lord, the Prophet wrote: "The Book of Mormon is a record of the forefathers of our western Tribes of Indians, . . . By it we learn that our western tribes of Indians are descendants from that Joseph that was sold into Egypt, and that the land of America is a promised land unto them, . . ." (History of the Church 1:315).

These statements, when considered together, certainly do not rule out a western North American location, such as Baja California, for the Book of Mormon lands, and perhaps provide impressive supporting evidence.

## The Shape of the Land

The text of the Book of Mormon provides a surprising number of references describing the shape, relative location and size of the land. We refer to these locational scripture references as Global Positioning Scriptures (GPS). We maintain that the land configuration of Baja California, or the configuration of any other land, must match these GPS references if it is to be considered a potential location.

Two scriptural references provide descriptions of the outer shape of the Book of Mormon lands. Jacob, the brother of Nephi, in speaking to his people, states that ". . . we have been driven out of the land of our inheritance; but we have been led to a better land, for the Lord has made the sea our path, and we are upon an isle of the sea" (2 Nephi 10:20). The word is/e can refer to an island, especially a small one, completely surrounded by water, or it can denote a peninsula, a narrow portion of land extending into, and almost surrounded by, the sea. The word peninsula in Latin means "almost an island."

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Isle noun
    an island or peninsula . . .
    New Oxford American Dictionary
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An additional depiction of the shape or configuration of the Book of Mormon lands is provided by Mormon, within his detailed geographical description of all the lands (Alma 22:27-34). Mormon states: ". . . the land of Nephi and the land of Zarahemla were nearly surrounded by water, there being a small neck of land between the land northward and the land southward" (Alma 22:32). In his account, Mormon not only describes the major lands of Nephi and Zarahemla as being "nearly surrounded by water," but also indicates that only the small neck of land to the north prevented these same lands from being completely surrounded by water. This is a concise description of a peninsula and helps to clarify the use of the word isle, by Jacob, to portray their land. The shape of Baja California, the largest peninsula in North America, fully conforms to this description in a striking and remarkable way.

## Mormon's Description of Book of Mormon Lands

When the King of the Lamanites converted to the gospel, through the preaching of one of the sons of Mosiah, he sent a proclamation to all his people declaring that all four sons of Mosiah could preach the gospel in all parts of the land, without hinderance. Mormon, at this point in his abridgment of the conversion account, pauses his narrative and inserts a detailed description of the King's land, including a description of the land of Nephi, the land of the people of Zarahemla, and the lands previously occupied by the Jaredites (Alma 22:27-34). No explanation for the inclusion of these Global Positioning Scriptures (GPS) is given. However, these eight verses, providing some 20 geographical details, in sequence, are without equal for finding and matching a proposed location to the Book of Mormon story. In these verses, Mormon defines the shape of the combined land area, the relative location of the lands within the larger area, and the spatial location of wilderness areas, the small neck of land, the river Sidon and the west and east seas.

We contend that any proposed location of Book of Mormon lands would be required to pass the test of fully matching the geographical descriptions recorded by Mormon in Alma chapter 22. The following maps depict the results of our correlating these 20 geographical points to the area and landforms of Baja California. It is difficult to portray on static maps what is best shown in a dynamic visual presentation. We recommend that the reader view the maps point by point, while reading the corresponding scripture text. This comparison process is best accomplished when followed through several iterations. This helps one to better grasp the considerable detail that Mormon so masterfully presents in only a few statements. We contend that the configurations and alignments of the Baja California peninsula match the geographical points in Mormon's description of the Book of Mormon lands.

## Boundaries of the Lamanite Lands (Points 1-5)

The Lamanite lands encompassed the land of Nephi, the large land area abandoned by the Nephites when (the first) Mosiah moved his righteous followers to the land of Zarahemla, a land previously settled by the people of Zarahemla (the Mulekites) after a devastating war (Omni 1:12-30). The four sons of (the second) Mosiah left their home in Zarahemla and spent a 16-year mission among the Lamanites in the land of Nephi. Their missionary service led to the conversion of the King of the Lamanites. The King sent a


Points $1-5$. The boundaries of the King of the Lamanite's land within the larger land of Nephi.
proclamation allowing the missionaries to preach the gospel throughout his land and people. The description of the borders of the King's land includes a sea west and a sea east, and a wilderness area dividing the land of Zarahemla from the land of Nephi, also bordered by the sea west and the sea east. Note on the map that the long dimension of this wilderness area extends north to south (up-down), like a man's long neck tie, rather than east to west like a bow tie. The description positions a "round about," a Lamaniteheld cape area to the west of the land of Zarahemla and locates the river Sidon along the
northern border of the Lamanite lands. This border region, in turn, also served as the southern limit of the Nephite lands.

## Location of the Lamanites (Points 6-10)

The idle Lamanites dwelt in tents in the wilderness areas along the west coasts of their lands and on the east coast where they had been driven by the Nephites. The western coastal locations included the wilderness west of the land of Zarahemla (the cape "round about"), the wilderness west of the land of Nephi, and the area along the western seashore


Points 6-10. The location of the Lamanites within the larger Land of Nephi.
in the place of their father Lehi's first landing. The relative locations of the idle Lamanites position the landing site on the west coast of the southern extent of Baja California. Note that the Nephites, when located in the land of Zarahemla, were surrounded by the Lamanites on three sides.

## The Location of the Northern Lands of Zarahemla, Bountiful and Desolation (Points 11-15)

The Nephite lands were positioned in the area north of the narrow strip of wilderness and the head of the river Sidon. The "round about" cape again figures prominently in the demarcation of the borders dividing the Lamanites and Nephites. Three Nephite-held lands


Points $11-15$. The location of the northern lands of Zarahemla, Bountiful and Desolation.
-Zarahemla, Bountiful, and Desolation-extended in sequence towards the north. The Jaredites before their destruction possessed the land of Desolation. The people of Zarahemla (the people of Mulek) initially landed in this area and then moved south to a place they called the city and land of Zarahemla. Both the land of Desolation and land of Bountiful are described as being filled with all manner of wild animals.


32 And now, it was only the distance of a day and a half's journey for a Nephite, on the line Bountiful and the land Desolation, from the east to the west sea;
and thus the land of Nephi and the land of Zarahemla were nearly surrounded by water,
there being a small neck of land between the land northward and the land southward.

33 And it came to pass that the Nephites had inhabited the land Bountiful, even from the east unto the west sea,

20
and thus the Nephites in their wisdom, with their guards and their armies, had hemmed in the Lamanites on the south, that thereby they should have no more possession on the north, that they might not overrun the land northward.
34 Therefore the Lamanites could have no more possessions only in the land of Nephi, and the wilderness round about. Now this was wisdom in the Nephites - as the Lamanites were an enemy to them, they would not suffer their afflictions on every hand, and also that they might have a country whither they might flee, according to their desires.

Points 16-20. The justification of the Nephite strategy to "hem in" the Lamanites on the south and for providing a country to the north where the Nephites might flee.

## The Nephite Strategy to Hem in the Lamanites (Points 16-20)

The major lands of Nephi and Zarahemla were "nearly surrounded by water," except for a small neck of land with a width equal to a day and a half journey for a Nephite. This neck of land was spanned by a fortified defense line from the sea west to the sea east. Within this peninsula-shaped configuration, the land of Bountiful extended from the sea west to the sea east and was settled by the Nephites. The concluding verse explains the Nephite strategy (wisdom) of hemming in the Lamanites on the south in the land of Nephi, and in the wilderness "round about," thus preventing the Lamanites from overrunning the lands to the north. The goal of this strategy was to minimize conflicts with the Lamanites, and at the same time leave the Nephites a country to the north where "they could flee according to their desires." These confinements and exit strategies could only be enacted on a peninsula.

## Face of the Land Changed

Mormon wrote these 20 geographical descriptions as part of his abridgment in about A.D. 385 , some 460 years after the missionary event he is recording. It is interesting to note that Mormon makes no mention of any changes to the configuration of the lands in the intervening years, such as the wide-scale destruction which took place at the time of the Savior's crucifixion, when ". . . the whole face of the land was changed . . ." (3 Nephi 8:12). It would appear that these changes to the surface of the land did not adversely affect the shape and locations of the larger land configurations mentioned in Mormon's description, and that the geographical descriptions were still accurate in his day.

## Significant Geographical Features

The story of father Lehi's family starts suddenly in the land of Jerusalem and abruptly ends some 1,000 years later in the land of Cumorah. As dissensions and population pressures increased, descendants of the small group that landed in the south of Baja California, during periods of their long history, moved towards empty lands to the north. Along the way they merged with the people of Zarahemla (the Mulekites) and then later they settled in the lands left desolate by the destroyed Jaredite civilization. This often-turbulent Nephite history (600 B.C. to A.D. 421), even though mostly chronological in the Book of Mormon account, is not uniformly represented. For example, the pages in the books of Mosiah,

Alma, Helaman, and Third Nephi represent some 200 years, or approximately one-fifth of the Nephite history. Yet this short time period occupies nearly two-thirds, or 319 of the total of 531 pages in the Book of Mormon. As a result, fewer geographical details are recorded from the first 400 years when the Nephites were settled in the land of Nephi and the last 400 years when they were primarily located in the northern lands of Bountiful and Desolation and farther north. The loss of the 116 pages of Mormon's abridgment of the


The timeline of the Book of Mormon in relationship to the number of pages in each of the books.
Book of Lehi (see the heading to Doctrine and Covenants 10), which spanned the first 400 years of the Nephite history in the land of Nephi, presumably denies us more geographical details than provided by the less-secular small plates of Nephi covering the same time period (First Nephi to Omni). Likewise the Book of Fourth Nephi records nearly 300 years of the history in only four pages and, understandably, with almost no geographical details.

Because little is recorded about the land of Nephi, the better-known lands are the lands of Zarahemla, Bountiful, and Desolation, the lands progressively located toward the north (see Mormon's description of these lands in the previous section). In the history of this north-trending migration several geographical benchmarks are described in some detail.

These significant features include the route from Jerusalem to the promised land, the land of Nephi, the river Sidon, the narrow neck of land, and the land of Cumorah. These prominent geographical details are known to all readers of the Book of Mormon. The following sections, using the triangulation of global positioning scriptures (GPS), provide proposed locations for each of these five geographical reference points.

## From Jerusalem to Baja California

How did Lehi's family reach their promised land in Baja California? And which route did they follow? The story of the Book of Mormon begins in the land of Jerusalem with Lehi


Lehi's Journey from Jerusalem to Bountiful.
and Ishmael's families, along with Zoram, the servant of Laban. This small party, at the Lord's insistence, flees from the troubled city of Jerusalem and takes their tents, seeds, and other provisions and departs into the wilderness.

They travel south along the border of the Red Sea and then east across the breadth of the Arabian peninsula, wading through "much affliction," to a coastal location they called Bountiful - a trip equal in distance from California to Florida and some eight years in duration. Here in a semi-tropical oasis they gather "much fruit and also wild honey," and Nephi builds a ship with the Lord's direction (See 1 Ne. 1-18). This land route of some 2,000 miles from Jerusalem to Bountiful on the Indian Ocean has been investigated and mapped by several researchers, first by Hugh Nibley, then subsequently by Lynn and Hope Hilton and Kent Brown. ${ }^{1}$

The Bountiful retreat on the east coast of the Arabian peninsula is in a microclimate similar to the southern area of Baja California and at about the same latitude. The ocean route the outcast group followed from Bountiful to the promised land is not delineated in the Book of Mormon record. The account says they were "driven forth before the wind for the space of many days," and crossed the sea, which


Proposed location of Bountiful near Salalah, Omen. they called "Irreantum, which, being interpreted, is many waters" (1 Ne. 18:9; 17:5). The wind patterns in the Indian Ocean, to the east of Bountiful, are westerly, that is, the winds came from the west and would have driven them toward the east. Nephi's ship might have stayed close to the coasts, or, since they were directed by the Lord and the Liahona, "a ball of curious workmanship" that "pointed the way," they could have shortened the route by heading through the open waters of the Indian Ocean to the Pacific Ocean and then through one of several

[^0]passages, such as the Strait of Malacca between the Malay peninsula and the Indonesian island of Sumatra. These are time-honored sailing routes that led from Africa and Arabia to the Pacific.


Lehi's Ocean Journey relative to ocean currents and winds.

Once in the Pacific Ocean near the Philippines, the ocean currents and the wind patterns in the north Pacific follow a clock-wise circular motion because of the movement of the earth's atmospheric circulation around high pressure cells that control the direction of the winds and the water beneath. The westerly trade winds are developed in the mid-latitude segment of this clock-wise circulation. Sailing vessels took advantage of these "westerlies" when sailing from the Orient to North America. Commencing in 1565, hundreds of Spanish galleons for nearly three centuries sailed from the Spanish-held Philippines, laden with silk cloth, spices, porcelain and other riches from the Orient, to the lucrative North American and European markets. Many of these Manila galleons sailed for some three to four months directly to Baja California ports such as La Paz.

With the Lord's protection, the compass direction of the Liahona, the favorable winds and ocean currents, and Nephi's guidance of the ship, Baja California would have provided a reachable destination ( $1 \mathrm{Ne} .18: 8-23$ ). Others have sailed this same general route. The family of Lehi was one of many, and the Jaredites and the people of Zarahemla (Mulekites)
possibly traveled along a portion of the same route, especially the mid-latitude, Pacific Ocean sector.

The Book of Mormon account provides some indicators as to where on the Baja California peninsula Nephi's ship would have landed. Mormon in his detailed description of the Book of Mormon lands specifies the location of the idle Lamanites as being in the wilderness area to the west of the land of Zarahemla and in the wilderness area to the west of the land of Nephi, and also in the borders by the seashore on the west in the place of their father's first inheritance (See Alma 22:27-34 and Mormon's Description of Book of Mormon Lands). Within Mormon's general description, these relative Lamanite locations would position the landing site, the place of father Lehi's first inheritance, on the west coast of the southern extent of Baja California. And this coastal location is positioned alongside the wind-driven Pacific route of the Spanish galleons and other ships sailing from the Orient.


[^1]
## The Land of Nephi

As noted, the loss of 116 pages of Mormon's abridgment of the Book of Lehi denies us geographical descriptions of the land of Nephi, the home of the children of Nephi for some 400 years (about 589-200 B.C.). The Book of Mosiah, fortunately, provides some helpful descriptions in the recorded travel accounts of Ammon's party and Zeniff's group back to the land of Nephi (Mosiah 7-8 and 9-22). Additional geographical descriptions are recorded in Zeniff's account of Alma establishing the church of Christ in the land of Nephi and the account of Alma leading his followers, under the Lord's direction, north from the land of Nephi to the land of Zarahemla (Mosiah 18, 23-24).

## The Hill North of Shilom

Both the accounts of Ammon's party and Zeniff's group mention one prominent geographical feature that served as an exit landmark after journeying south through the rugged narrow strip of wilderness between Zarahemla and the land of Nephi. This landmark is referred to as "the hill north of the land of Shilom." The land of Shilom was in the north of the large


The hill north of Shilom near Constitución, Baja California. land of Nephi, just south of the narrow strip of wilderness. In the account of Ammon's party of 16 strong men traveling south from Zarahemla to the land of Nephi, it is mentioned that after wandering forty days through the wilderness, "they came to a hill, which is north of the land of Shilom, and there they pitched their tents" (Mosiah 7:5). Ammon and three others continue on into the land of Nephi and meet king Limhi. The king imprisons the four men, but eventually allows them to return to the "hill which was north of Shilom, and bring their brethren into the city, that thereby they might eat, and drink, and rest themselves from the labors of their journey; for they had suffered many things; they had suffered hunger, thirst, and fatigue" (Mosiah 7:16). A city of Shilom is also mentioned (Mosiah 7:21; 9:8).

Some years earlier, Zeniff's group journeyed south from Zarahemla and settled in the land of Nephi. Zeniff's son, Noah, later became king and built buildings in the land of Shilom, including a great tower on the "hill north of the land of Shilom." This land, the account notes, "had been a resort for the children of Nephi at the time they fled out of the land" (Mosiah 11:13). It would appear that this "fleeing" refers to the earlier time when Mosiah (the first) was "warned of the Lord that he should flee out of the land of Nephi, and as many as would hearken unto the voice of the Lord should also depart out of the land with him, into the wilderness" (Omni 1:12-19). Mosiah and his followers were led by the Lord to the land of Zarahemla where they "did unite together" with the people of Zarahemla, and "Mosiah was appointed to be their king."

According to these two accounts, this prominent hill was north of the land and city of Shilom in the land of Nephi and positioned near the south end of the narrow strip of wilderness. The rugged terrain within this wilderness was an impediment to travel between the land of Zarahemla on the north and the land of Nephi to the south. This wilderness also extended from the sea west to the sea east (Alma 22:27). Our proposed area in Baja California that corresponds to the relative location of the land of Shilom in the land of Nephi, and that gently merges into the southern boundary of the narrow strip of wilderness to the north, is relatively flat with only one hill of significance. Today this singular hill is known as El Cerrito (Spanish for "the little hill") and serves as a prominent landmark for travelers emerging from the wilderness to the north, and for those living in the agricultural area to the south. We propose this hill as "the hill north of the land of Shilom."


A "fountain of pure water" matching the description of the Waters of Mormon.

## The Waters of Mormon

A place called Mormon is described in the record of Zeniff (Mosiah 9-22). Here Alma taught the people the words of salvation as he had received them from the prophet Abinadi. In this secluded place he organized the church of Christ and ordained priests. In Mormon there was "a fountain of pure water, and Alma resorted thither, there being near the water a thicket of
small trees, where he did hide himself in the daytime from the searches of the king" (Mosiah 18:5). Some 204 souls were baptized in these pure waters (Mosiah 18:8-17). A forest was near the waters of Mormon (Mosiah 18:30). This secluded location "received its name from the king, being in the borders of the land having been infested, by times or at seasons, by wild beasts" (Mosiah 18:4; Alma 5:3). It would appear that the border location was a wilderness retreat not far from the center of the King's land, possibly less than a day's journey. The place of Mormon was beautiful in the eyes of the new converts because there they "came to the knowledge of their Redeemer" (Mosiah 18:30).

The water at this location is described as a "fountain of pure water." The phrase, "pure water" appears elsewhere in the scriptures (Mosiah 23:4; Heb. 10:22; Rev. 22:1). Pure water seems to describe water that comes from an uncontaminated source - like a spring - rather than water flowing in rivers and into lakes downstream. A fountain is a container


A thicket of small trees near a "fountain of pure water." or reservoir of water or other liquids, such as the small reservoir in a fountain pen-the place where the ink is held. A baptismal font is a fountain containing water. The word font is the same as a fountain in this context. The word font in relationship to fountain is the same as the word mount is to mountain. Font can also be spelled fount. The word font in Latin refers to a "spring, fountain." In nature, a spring and a fountain (a natural reservoir) often occur together. All of this would render "fountain of pure water" as a natural water body or reservoir at the source of pure or spring water (see the definitions of font and fountain in the New Oxford American Dictionary, 2nd Edition). We have provided a rather lengthy description and definition of the word fountain. But this may help in understanding its connotation in the Book of Mormon account and possibly its meaning in the phrase, "fountain of the Red Sea," mentioned by Nephi ( $1 \mathrm{Ne} .2: 9$ ), and also the phrases "fountain of living waters" and "fountain of filthy water" in the vision of the tree of life recorded by Lehi and Nephi (1 Ne. 8:20, 32; 11:25; 12:16). It should be noted that in none of the descriptions of the Book of Mormon lands is the word lake used to describe a body of water.

In Baja California, and especially in the central area of our proposed land of Nephi, the main source of water is springs, not the typical system of tributaries with rivers and lakes, common in more humid lands. These springs flow directly into small natural fountains or reservoirs. This same pattern of springs and fountains is common in Biblical lands. There are numerous "fountains" of "pure" spring water in our proposed land of Mormon, sufficiently large to perform baptisms and in a wilderness area of wild animals. These natural fountains fully match the description of the waters of Mormon and are located less than a day's journey from the center of our proposed land of Nephi. Unfortunately, it is not possible to pinpoint which of these several fountains is the actual waters of Mormon, but we can identify an area with a number of suitable candidates.

## The Land and City of Helam

The people of Alma were warned by the Lord that the armies of king Noah were preparing to destroy them, and they should gather their flocks and their grain and depart into the wilderness (Mosiah 23:1). With the Lord's care, the group fled the land of Mormon and traveled eight days until "they came to a land, yea, even a very beautiful and pleasant land, a land of pure water" (Mosiah 23:2-4). Again they selected a location with "pure water," or a pure water source such as a spring. An eight-day journey, under the slow travel conditions of moving flocks and


Fountains of "pure water" in San Javier, Baja California. provisions, would take them some 60 to 70 miles into the wilderness. The people of Alma called their new home, the land of Helam, and "pitched their tents, and began to till the ground, and began to build buildings; yea, they were industrious, and did labor exceedingly (Mosiah 23:5, 19, 25-26). They prospered and built the city of Helam, even though their numbers tallied only in the hundreds (Mosiah 23:20).

The people of Alma were discovered by an army of the Lamanites and later placed in bondage (Mosiah 23:23-29). Under the Lord's protection, they escaped in the night and
fled into the wilderness for a day, to a place they called the valley of Alma. The next day they began a 12-day journey through the wilderness, towards the north, to the land of Zarahemla. There king Mosiah (the second) received them with joy (Mosiah 24:18-25).

Within the distance of an eight-day journey from our proposed location for the land of Mormon, there are several valleys that match the description of the land of Helam. These valleys, in the southern extent of the narrow strip of wilderness, have springs of pure water, areas of tilled land, and places for flocks. The Spanish in the 1700s established missions and built settlements in three of these wilderness valleys: Misión La Purísima Concepción


A large olive tree growing in San Javier, Baja California. de Cadegomó; Misión San Jose de Comondú; and Misión San Francisco Javier de Viggé-Biaundó (San Javier). We propose the latter mission site of San Javier as the land and city of Helam. This valley is located some 60 miles - an eight-day journey - to the north of the land of Mormon and some 170 miles - a 13-day journey - to the south of the land of Zarahemla. These two distances match the Book of Mormon account and our proposed locations and travel routes in Baja California (see section on the scale of the Book of Mormon lands). Today, San Javier has a population of over 100 in a beautiful valley of pure water, flocks, and tilled land. The route in from the surfaced highway, however, is a 35-mile rough and winding dirt road, crossed by several spring watercourses, with no bridges. Still, hundreds of tourists visit this isolated historic town every year.


Satellite image of Rio San Ignacio (River Sidon), Central Baja California, Mexico.

## The River Sidon

The river Sidon carries the distinction of being the only river in the Book of Mormon mentioned by name. The river and its relative position play a significant role, from its key location near the major city of Zarahemla, to serving as the site of numerous war battles along the geopolitical frontier: the buffer zone separating the Nephite-controlled land of Zarahemla on the north from the Lamanite-held land of Nephi towards the south. The river Sidon is mentioned twice within Mormon's detailed description of the Book of Mormon lands (Alma 22:27-34). Mormon's description leaves little question as to the river Sidon's relative location. And this location accurately matches the position of the only river of significance within central Baja California. There is only one choice. Today the river is known as the Rio San Ignacio. It is of interest that the land of Israel with a similar climate regime has only one major river, the Jordan, and Egypt has only one, the Nile.

Beyond being in the appropriate location relative to major Book of Mormon lands, the Rio San Ignacio and its surroundings should match the following geographical features:

## The Head of the River Sidon

The river Sidon in the Book of Mormon account has a distinct and singular attribute, referred to as "the head" (Alma 22:27, 29; 43:22; 50:11; 56:25). This head of the river Sidon is described as a geographical feature one would go around (Alma 43:22; 56:25) and a possible site where baptisms were performed (Alma 4:4). Unlike nearly all rivers, which commonly have multiple tributaries as their source, the Rio San Ignacio has a striking and beautiful, elongated lagoon at its head. Directly fed by several springs, the water in this narrow lagoon flows from east to west, the same direction mentioned in Mormon's account (Alma 22:27). This spring-fed head resembles


Head of the River Sidon in San Ignacio, Baja California. the spring-fed head at the source of its namesake, the Sidon River in the country of Lebanon, called the Saida river in Arabic, and also similar to the Jordan River in Israel which is fed by multiple springs, one near Caesarea Philippi.

## Wilderness of Hermounts

A wilderness area, with the curious name of Hermounts, is mentioned in the account of the war between the Nephites and the Amlicites, a breakaway group of Nephites who were joined by the Lamanites (Alma 2:37).


Sierra de San Francisco near San Ignacio, Baja California.

During the final battle, the Amlicites and Lamanites were scattered by the Nephites, and fled to the wilderness area of Hermounts, which is described as being to the west and north of the battle area. The location of this final conflict was near the city of Zarahemla at the head of the river Sidon (Alma 2:24-34). Hermounts is depicted as "that part of the wilderness which was
infested by wild and ravenous beasts" (Alma 2:37). And many Amlicites and Lamanites "were devoured by those beasts and also the vultures of the air; and their bones have been found, and have been heaped up on the earth" (Alma 2:38).

To the west and north of the Rio San Ignacio (river Sidon) in Baja California is an extensive wilderness area and mountain range called Sierra de San Francisco. We propose this mountain range as the wilderness of Hermounts. The Sierra de San Francisco extend 35 miles and rise from sea level to a height of some 5,000 feet. The crests are often covered with snow in the winter months. Wild animals roam this wilderness area today, and visitors are attracted to the world-class rock paintings scattered throughout the rugged interior. This mountain range is the source of the underground water feeding the springs at the head of the Rio San Ignacio (river Sidon).

We should note that the source of the springs at the head of the River Sidon in Lebanon is a large mountain range named Mount Hermon. It rises to heights of over 9,000 feet and extends into the surrounding areas of Syria, Israel and Lebanon. The Sierra de San Francisco (Hermounts) in Baja California and Mount Hermon in the biblical lands have similar characteristics: both are imposing mountain ranges that can be seen from many miles, and their profiles are striking when covered with snow. And both mountain ranges are positioned in such a manner that their respective rivers, the Rio San Ignacio (river Sidon) and the River Sidon, flow toward an ocean to the west. Because their names and settings are similar, one could surmise that Hermounts was named by the people of Mulek after its almost identical counterpart, Mount Hermon, in their biblical homeland. The writer of the book of Psalms calls the area of Mount Hermon in northern Israel, Hermonites (Ps. 42:6).

## Crossing the River Sidon

In the Book of Mormon record the Lamanite and Nephite armies cross the river Sidon multiple times in quick succession and with seemingly ease. During a single battle around hill Riplah, there are at least six separate crossings of the river Sidon by


River Sidon valley near San Ignacio, Baja California.
significantly large army groups (Alma 43:23-54. See also, Alma 2:27, 34-35; 16:6-7). No boats are mentioned. Directly downstream from the head of the Rio San Ignacio the watercourse noticeably narrows and can be readily crossed. And the river at this location can be waded with little effort, like the Jordan River in Israel and the Sidon River in Lebanon, in slow moving, shallow water. Much of the water originating at the head of the Rio San Ignacio reaches the sea through underground stream courses, thus diminishing its above-ground flow downstream. This is common in dryer climates, especially at certain seasons of the year.

## Hills, Valleys and Banks

In the Book of Mormon account, hills, valleys, and banks border the river Sidon (Alma 2:15, 17, 34; 3:3; 43:27, 32, 35, 40-41, 51; 49:16). Today, prominent hills, well-defined valleys, and banks with high and precipitous cliffs flank the Rio San Ignacio along much of its course, matching the features described in the record. For example, the Book of Mormon account notes that several battles were fought around prominent hills near the river Sidon (Alma 2:15-19; 43:25-54. See also, Morm. 1:10). The hill Amnihu, on the east of the river Sidon, was the site of a battle fought on its top, presumably somewhat flat. Hill Riplah is also described as east of the river


Hill Riplah east of River Sidon. Sidon with a valley on the south and east of the hill where part of the Nephite forces were sequestered from the advancing Lamanite army. Mormon describes numerous and intricate geographical features that contribute to Moroni's military victory at hill Riplah (Alma 43). There are two prominent hills matching these topographic features on the east bank of the Rio San Ignacio, not far from its head.

## Bodies are Cast into the River Sidon

During two Book of Mormon battles, the bodies of the slain Lamanites were cast by the Nephites into the "waters of Sidon." Their bones ended up in the depths of the sea. Note that the record implies that this movement to the sea could have happened later, not immediately, and that the bones, not the bodies, are in the sea (Alma 2:34; 3:3; 44:21-22). Today the Rio San Ignacio periodically floods and overflows its lower banks, as is common with rivers in semi-arid regions, and sweeps away the debris in the river valley, including, at times, unfortunately, even live cattle and people.

## City of Zarahemla and the City of Gideon

It is noted in the Book of Mormon account that Alma went over the river Sidon when going from his home in the city of Zarahemla to the valley and city of Gideon on the east of the river (Alma 6:7). This infers that the city of Zarahemla was located on the west of the river Sidon, and that the city of Gideon, east of the river, within a valley of the same name, was near the city of


Date palms near La Joya, Baja California. Zarahemla. This two-city alignment matches the towns of La Joya (Zarahemla) and San Ignacio (Gideon) which are located today on opposite sides of the Rio San Ignacio at its head, with the town of San Ignacio positioned in a notable valley.

We propose that the Rio San Ignacio, and its surrounding riverine features, not only match the required location of the river Sidon in the Book of Mormon account, but also all the recorded geographical details.

## The Narrow Neck of Land

The image of a narrow neck of land is possibly the most prominent geographical feature in the mental maps of Book of Mormon readers. This hour-glass-shaped segment of land


Satellite image of the Narrow Neck of Land in Baja California, Mexico.
figures conspicuously in the relative location of Book of Mormon lands and in the geopolitical defense strategy of the Nephites. And this reality has elicited much discussion as to its location on the earth's surface. The narrow land area is described as a "neck," which implies that it could extend for a distance, even to a length matching or exceeding its width, like the corresponding anatomical part of a human, rather than being only a short convergence point. There is a narrow neck of land on the peninsula of Baja California linking two land areas matching the geographical descriptions in the Book of Mormon and positioned between the Pacific Ocean on the west and the Sea of Cortez on the east. The width of this neck of land measures some 40 miles, with an easily traversed walking distance of about 50 miles. Several geographical details in the Book of Mormon describe not only the narrow neck but also the defense line which crossed it.

## Extending from the East to West Sea

The narrow neck of land in Mormon's detailed description of the Nephite and Lamanite lands, extends from the east to the west sea and is the nexus around which other
geographical regions are positioned, especially the land Desolation and the land Bountiful (Alma 22:27-34). This land area is called a "small neck of land" by Mormon in Alma 22:32, but a "narrow neck of land" in Alma 63:5. Moroni calls it a "narrow neck of land" in Ether $10: 20$. The land Bountiful to the south of the narrow neck of land is described as a wilderness area "filled with all manner of wild animals of every kind, a part of which had come from the land northward for food" (Alma 22:31). The land Desolation to the north is depicted as being "rendered desolate and without timber, because of the many inhabitants who had before inherited the land" (Hel. 3:5-6). The narrow neck of land of Baja California is bordered by geographical areas with wild animal habitats on both the north and the south.

## Fortifiable Defense Line

A significant feature within the narrow neck of land is a line, a defense line fortified by the Nephites as part of their strategy to "hem in" the Lamanites towards the south and to defend the north as a last-chance region where the Nephities, "might have a country whither they might flee, according to their desires" (Alma 22:32-34). The Book of Mormon account implies that this defense line extended across its width from the east to the west sea and was defensible by the Nephites with the addition of fortifications (Hel. 4:7; Alma 52:9). It would have been impossible to


Satellite image depicting how the Lamanites were
"hemmed in" or enclosed towards the south of the Baja California peninsula.
prevent the movement of the Lamanites into the northern lands if the defense system only extended across part of the width of the narrow neck of land. Mormon states that the length of this defense line was "a day and a half journey for a Nephite" (Alma 22:32). Later he states that the distance could be travelled by a Nephite in a single day (Hel. 4:7). Possibly over time the route of the defense line was shortened or improved, allowing a reduced travel time. The proposed narrow neck of land in Baja California is about 40 miles wide, with a walking distance of some

50 miles. At a rate of three to four miles per hour, a seasoned hiker can walk this distance in 13 to 16 hours - a journey which fits well within the daylight hours of a day and a half, any season of the year, and also matches the walkable hours of light, of even a single day, during many months of the year.

## A Natural Harbor and the Sea that Divides the Land

Mormon records that at the western end of the narrow neck of land, Hagoth, an "exceedingly curious man," built an exceedingly large ship and launched it "on the borders of the land Bountiful, by the land Desolation," to carry people and provisions to the land northward (Alma 63:4-10). The account in the Book of Ether states that at the eastern side of the narrow neck of land is "a place where the sea divides the land" (Ether 10:20). The


Satellite image of the proposed location near the narrow neck of land where Hagoth launched ships into the West Sea. narrow neck of land in Baja California is flanked on the west by a beautiful and peaceful bay that has long-served as the location of a commercial fishing village and recently as the site of a maritime port facility for launching yachts and other vessels into the Pacific Ocean. On the eastern or Sea of Cortez side of the narrow neck of land is a bay, Bahía de los Ángeles, which, as a bay, separates the coastal areas surrounding it. This bay merges toward the east with an ocean strait, Canal de Ballenas, which separates the bay from the Isla Ángel de la Guarda, also called Archangel Island. The physical positioning of the narrow neck of land, the bay, the strait, and the island, match the Book of Mormon geographical description as "a place where the sea divides the land."

## Two Natural Passes that Constrict Travel

The Book of Mormon account describes two natural passes along the Nephite defense line. One is a narrow passage near to the western end of the defense line and the other is a narrow pass right along the sea at the eastern end of the line (Alma 50:34; 52:9; Morm.

2:29; 3:5). The intervening stretches of the defense line appear to be have been surrounded by more rugged terrain, on both the north and the south, that served as a barriers to travel. This would have forced the Lamanites, and even the Nephites, through the passes in order to advance towards the north. The Nephites "secured" these two passes to prevent the Lamanite armies from moving into the northland, thus preventing them from obtaining these points and having "power to harass them on every side" (Alma 52:9). The Lamanites at this time already controlled land that surrounded the Nephites on


Satellite image of the proposed narrow passage in the narrow neck of land.


Satellite image of the proposed location of narrow pass by the sea where the sea divides the land.
three sides (Alma 22:27-34, especially vs. 29). Today the narrow neck of land in Baja California has two distinct narrow passes, in locations matching the Book of Mormon account, that could be readily defended as choke points for the movement of armies traveling north and south through the narrow neck of land. The "narrow pass by the sea," where "the sea divides the land," is less than a half mile in width, and the "narrow passage" on the western side is only a few hundred yards wide.

We propose that the narrow neck of land in Baja California, and its corresponding geographical features, not only match the location of the narrow neck of land in the Book of Mormon, as depicted in the account, but also all the related geographical details.

## The Hill Cumorah

Is there one hill Cumorah or are there two hills with the same name? This question has been the focus of many debates. Like most controversial topics, it depends how one


The land of Cumorah where the Nephite and Jaredite civilizations were destroyed.
defines the subject of the dispute. In this case, what does one mean by the name, hill Cumorah? There was one hill Cumorah at the time Mormon wrote his account. Namely, the hill where Mormon before his death deposited all the records in his care except for the gold plates which he give to his son Moroni (Morm. 6:6). That hill was in what the Book of Mormon calls the land of Cumorah, in the land northward, a land not many days north of the land of Zarahemla (Morm. 1-6). The land of Cumorah is where the final battle between the Lamanites and Nephites was waged and the Jaredite civilization was destroyed. The Jaredites called the hill Cumorah the hill Ramah (Ether 15:11). In our proposal we place the general location of this hill and its surrounding battle grounds in northern Baja California and not in the State of New York.

There was only one hill Cumorah at the time the Prophet Joseph Smith received the Book of Mormon plates. That is, the hill in the land of Cumorah where the Nephite and Jaredite civilizations were destroyed. The hill where Moroni deposited the gold plates, near the village of Manchester in New York, is not the same hill as the hill Cumorah where his father Mormon buried all the records of the Nephite history, except for the few plates that were
given to Moroni (Morm. 6:6). The Prophet Joseph Smith described the hill near his home only as a "hill of considerable size, and the most elevated of any in the neighborhood" (JSH 1:51). In his history, the Prophet Joseph Smith did not call this hill, the hill Cumorah, nor did Moroni. Sometime later, members started calling the Manchester hill, the hill Cumorah, and that name has indelibly entered into our language, most likely to stay. It would have been far less confusing if it had been given a name such as Manchester Hill (the village it is near), Moroni's Hill, or Mormon Hill. Some residents in the area have called it Mormon Hill.


The hill Cumorah near El Marmol, Baja California.

Today there is still only one actual hill Cumorah, the hill in the area where the Nephite and Jaredite civilizations were destroyed. Mormon describes the hill Cumorah as being in the land of Cumorah, a "land of many waters, rivers and fountains" (Morm. 6:4). Mormon chose this land for their last battle with the Lamanites because he hoped that there they would gain an "advantage over the
Lamanites" (Morm. 6:4). The nature of this "advantage" is not stated in the account. Four years were spent gathering the Nephite people to the land of Cumorah; and some 230,000 Nephite men, women and children were killed in the final battle. Only 24 of their number survived, including Mormon and his son Moroni. The next morning Mormon and others ascended the hill Cumorah to survey the scene of destruction below (Morm. 8:2-11). The survivors, including Mormon, were killed by the Lamanites; and Moroni remained to record these last events (Morm. 8:2). The Book of Mormon account says the hill Cumorah is near the hill Shim in the land northward. And the hill Shim is where Ammaron deposited the Nephite records that Mormon later retrieved (Morm. 1:3; 4:23; Ether 9:3). We don't know the precise locations of these two hills, but in our proposal we indicate a possible setting within northern Baja California. There are hills in this area with features that match the geographical descriptions in the Book of Mormon. Someday we may be able to identify the exact location of the hill Cumorah and the hill Shim. And someday we may know more about how Moroni transferred the plates in his care to the hill near Manchester, New York.

The name Cumorah is mentioned in Doctrine and Covenants 128:20. It is not clear if the name refers to the land of Cumorah, or the hill Cumorah, or if it is a general term for the lands where Mormon and Moroni penned the glad tidings of the Book of Mormon record.

## After Cumorah

The geography of the Book of Mormon does not end at Cumorah in A.D. 385. Many centuries before the final battle between the Lamanite and Nephite civilizations, Nephi and Alma prophesied the ensuing fate of father Lehi's descendants. Later, Mormon and Moroni also prophesied the destiny of their people. These foreshadowings and their fulfillment can be grouped into six stages:

1. The Nephite and Lamanite civilizations are destroyed.
2. Many Lamanites and some Nephites escape the destruction.
3. The survivors are swept off the land and scattered over the face of the earth.
4. The descendants of the survivors are smitten and scattered by the gentiles.
5. The gospel is established among the descendants who remain.
6. These descendants of father Lehi are taught the gospel and embrace the truth.

All of these stages have geographical and spatial implications over a wide area of the North American continent and over many centuries. Using these six stages, the course of father Lehi's children after Cumorah can be traced. Numerous scripture references provide considerable detail.

## The Nephite and Lamanite Civilizations are Destroyed

The Lamanites and the Nephites dwindled in unbelief until the fulness of their iniquity, then their civilizations were destroyed through the hand of the Lord by wars, pestilences, and famines. That is, they no longer existed as a people with a centralized government and coherent organizations. The church and its authority also ceased to exist. There was chaos throughout the land, and those who remained warred one with another. (See, 1 Ne .

12:22-23; 13:35; 2 Ne. 26:8, 16-18; Mosiah 12:8-9; Alma 45:10-14; Hel. 2:10-14; 4 Ne. 1:34, 38; Morm. 8:2-3, 7-8; 9:20, 35; Ether 9:3; D\&C 3:17-20)

## Many Lamanites and Some Nephites Escape the Destruction

A goodly number of the Lamanites survived the slaughter and destruction, along with the Nephites who had dwindled in unbelief and joined with the Lamanites. Gadianton robbers were among the survivors. All the disciples of the Lord were killed in battle or hunted down and killed by the Lamanites, except for Moroni who died some years later. (See, 2 Ne 3:3; 4:5-7, 9; 9:53; Enos 1:13-14; Alma 45:10-14; 50:22; Hel. 7:23-24; Morm. 5:7; Morm. 8:2-3, 7-9; Moroni 9:24)

The following scriptural references give support to the assertion that a significant number of Nephites escaped the final destruction and were scattered with the Lamanites. (See, 1 Ne. 13:30; 2 Ne. 3:3; 9:53; 29:12-13; Alma 45:10-14; Hel. 3:16; Morm. 5:7, 9, 15, 20; 8:2-3, 7-9; Moroni 9:24; D\&C 3:17-20; 10:45-48)

## The Survivors are Swept off the Land and Scattered Over the Face of the Earth

As was prophesied, all the Lamanites and Nephites were swept off their homelands. Most through death, but all those who remained-the Lamanites who were not killed in battle and also the Nephites who had gone over to the Lamanite side and who were not killedwere also "swept off" and out of the land (Ether 2:2-10). Those who were "swept off" scattered over all the face of the earth like branches broken off a tree. They separated into many subcultures and language groups with similar characteristics, and spread throughout western North American, and down to Meso-America. These language groups have been classified into an extended language family called Uto-Aztecan. This language family of Central America and western North America includes Comanche, Hopi, Nahuatl (the language of the Aztecs), Paiute, Pima, and Shoshone and others. Several linguists have traced the origin of this language family to the area around southern California and Arizona, near the borders of Baja California. ${ }^{2}$ Today, there are more Native American reservations in San Diego county than any county in the United States. (See, 1 Ne. 10:12-19; 12:22-23; 13:35; 22:8; Hel. 3:16; 15:12; Morm. 5:15, 17-20; Ether 2:2-10; D\&C 109:61, 67)

[^2]

Because we lack written records of the Lamanites and Nephites in their scattered locations, it is not possible to piece together their recent history. It appears today that the groups under the umbrella of the Uto language family have different characteristics than the groups within the Aztecan language family. This dichotomy might reflect the differing
characteristics portrayed in the Book of Mormon record. There were those among both the Lamanites and the Nephites who were referred to as "diligent" (Alma 7:23). These people were religious and gospel oriented, industrious, record keepers, freedom loving and agrarian based. But among each of the two groups there were also those who "dwindled in unbelief" (Morm. 9:20). The Lamanites who dwindled were easily stirred up, tribal, and primarily hunters and gatherers. On the Nephite side, those who dwindled were idolatrous, murderers, secretive, proud, pursued a kingship government, and often plundered for their maintenance.

After the destruction of the people at the time of Christ's crucifixion and his subsequent visit among them, all of this changed and "the people were all converted unto the Lord, upon all the face of the land, both Nephites and Lamanites, and there were no contentions and disputations among them, and every man did deal justly one with another" (4 Ne. 1:2). Within a few hundred years, however, all the harmony faded away and the people once more divided into two groups. Those "who rejected the gospel were called Lamanites, and Lemuelites, and Ishmaelites; and they did not dwindle in unbelief, but they did willfully rebel against the gospel of Christ; and they did teach their children that they should not believe, even as their fathers, from the beginning, did dwindle" (4 Ne. 1:38). The other group, the Nephites, dwindled in unbelief. As Moroni recorded, "they dwindle in unbelief, and depart from the right way, and know not the God in whom they should trust" (Morm. 9:20). Both the Lamanite and Nephites dwindled in gospel belief, leading to the loss of the Lord's protection during the struggles leading to the final battle at Cumorah. And when they were subsequently swept off the land and scattered, they seemed to have carried many of their traits from one generation to another, and these contrasting traits have appeared among the two major groups comprising the Uto-Aztecan extended language family.

## The Descendants of the Survivors are Smitten and Scattered by the Gentiles

In the last two centuries, the times of the gentiles, the descendants of Father Lehi's children in their scattered condition have been driven, hunted, smitten and further scattered by the gentiles, some to annihilation, many finding few places for refuge. For example, from 1683 to 1834, 30 mission settlements were founded in Baja California by the Jesuits, Franciscans, and Dominicans, with the goal to protect and teach the native population. But because of the pressures of European encroachment into their society, especially the unfortunate introduction of European diseases, the indigenous population
plummeted from an estimated 50,000 at the time of contact to a population today of only a few hundred. (See, 1 Ne. 13:14, 30, 34; 15:17; 2 Ne. 1:11; 26:15, 17, 19; Hel. 15:10-17; 3 Ne. 16:8; 20:15; 21:2, 24; Morm. 5:7, 9, 15, 20)

## The Gospel is Established Among the Descendants who Remain

After the organization of the church in Palmyra, New York, in 1830, the church headquarters changed locations until it moved west in 1847 to the valley of the Great Salt Lake. This relocation was prophesied and planned by Joseph Smith. Mormon colonies numbering some 500 were established in seven western states, western Canada and northern Mexico. Nearly all the settlements were situated within the lands of father Lehi's descendants, and early efforts were made to preach the gospel among them. It is of interest that during the initial movement of the Saints to the West, a battalion of Mormon soldiers was recruited and then dispatched to the San Diego area (1846-47) on the borders of Baja California. This area was under dispute in the Mexican-American war, as was the larger area that became the states of California, Nevada, Arizona and Utah and two states of Baja California. All of these areas in 1848 became United States territory in the Treaty of Guadeloupe Hidalgo; all, that is, except the area of Baja California which remained part of Mexico. This was done much to the disappointment of those living in Baja California who had been promised United States citizenship. Just before the signing of the treaty, a boundary line was drawn south of San Diego, excluding Baja California from the land transfer. The reason for this exclusion is unclear, but possible the hand of the Lord was in this last-minute change of plan. If it had become part of the United States, the population levels and the human landscapes and lifestyles of Baja California today would look more like southern California, rather than the isolated and tranquil peninsula that has prevailed behind the protection of an international border. (See, 1 Ne. 22:8; Hel. 15:12)

## These Descendants of Father Lehi are Taught the Gospel and Embrace the Truth

In fulfillment of the Father's covenant, and through the Lord's mercy, the remaining Lamanites and Nephites have been preserved and taught the gospel of Jesus Christ by missionaries of the Lord's church, primarily through the Book of Mormon, the testimony of their forefathers. (See, 1 Ne. 15:13; 2 Ne. 4:5-7, 9; 29:12-13; Hel. 15:10-17; 3 Ne. 21:5; D\&C 10:45-48; 19:27; 28:8-9, 14; 32:2; 54:8; 57:4)


Those who have embraced the gospel have been gathered physically by immigration and spiritually by conversion into the Lord's church. Today, they number in the millions and are organized in thousands of congregations throughout many countries. And more of father Lehi's children will continue to swell the church numbers in their scattered locations. (See, 1 Ne. 10:12-19; 15:13; 22:8; 2 Ne. 26:15; 3 Ne. 20:13, 15, 17; 3 Ne. 21:2, 24)

## The Scattering of the Jaredites and Others

Because of iniquity, the Jaredite civilization was also completely destroyed and swept off the same land. But unlike the Nephite and the Lamanite civilizations, the Jaredite civilization was destroyed right down to the last person. It stands to reason, however, that at various times, even near the end of their history, that some disaffected families or groups escaped from the chaos and turmoil of their people or wandered off to distant areas seeking safety, or new lands and opportunities. The account in the Book of Ether states that 22 additional families came with Jared and his brother to their new choice land (Ether $1: 33 ; 2: 1 ; 6: 16)$. These families and their descendants could have spread northward to other areas of North America. The descendants of these isolated groups could still be living on the western hemisphere. This scattering and splintering process most likely also happened among the Nephite and Lamanite people during their thousand-year history. Certainly the Book of Mormon record does not exclude the possibility of other groups fleeing their homeland and scattering to distant locations, including the islands of the Pacific.

## The Scattering and Gathering of the Jews

As prophesied, the descendants of Judah over the centuries have closely followed this scattering pattern of the Nephites and Lamanites. Because of iniquity they were swept from their Biblical homeland, scattered to distant lands, and smitten by the gentiles. In time, the Lord promised, by covenant, they would be gathered and embrace the gospel. Only the instruments of scattering - the Babylonians and the Romans-and the timing of the stages varied from the Lamanite and Nephite pattern. But unlike the Lamanites and Nephites, the Jews, with the Lord's direction, have been able to maintain their identity and recall the location of their homeland. To better understand their two histories, we underscore this parallel: Just as we would not expect to find the Biblical homeland of the Jews in the lands where they have been scattered, such as Europe, Russia, or North America (the diaspora), we should not expect to find the Book of Mormon homeland of the Nephites and Lamanites in the lands where they now live or have lived in their scattered condition.

## The Scale of the Book of Mormon Lands

The relative scale and extent of the internal distances of the Book of Mormon lands is an essential verification of any proposed location. And the actual distances within any proposed location on the surface of the earth should match the corresponding travel distances recorded in the Book of Mormon account. It would be difficult to rationalize any proposed location that doesn't reasonably match this scale.

To determine the extent of the lands traveled, one must convert the number of days travelled to miles. This conversion can be done by applying the following formula:

## miles $=$ days $\times$ miles traveled per day

The unknown variable is the number of miles a person or group would actually travel per day. We can reasonably calculate this rate of travel by first considering the following constraints:

- Travel is rarely in a straight line.
- Travel follows rivers and water sources for water and food for animals.
- Travel will normally occur in daylight hours which will vary throughout the year.
- Traveling in large groups requires additional time setting up tents and resupplying.
- The rate of travel (mph) increases on established routes.


## Modes of Travel

Next, it is helpful to designate the rate of travel for each of the journeys as fast, normal, or slow. To do this we need to consider the nature of the journey and the conditions under which each group traveled:

Fast travel This would be the normal rate of speed when one is traveling alone with a known route and destination with minimal provisions. This
would represent the speed of a seasoned hiker, and would yield the following distance per day:

$$
\begin{array}{ll}
\text { Rate: } & 3-4 \text { miles per hour } \\
\text { Time: } & 8-14 \text { hours per day } \\
\text { Distance: } & 30-50 \text { miles per day }
\end{array}
$$

Normal travel This would be the normal rate of speed when one is traveling in small groups with a general understanding of the travel route and with normal provisions such as food and a tent. This would yield the following distance per day:

Rate: $2-3$ miles per hour
Time: $\quad 6-10$ hours per day
Distance: 12-25 miles per day

Slow travel This would be the normal rate of speed when one is traveling in large groups such as families and armies with maximum provisions, and often flocks and animals. This slow rate matches the rate of travel of the Mormon pioneers when crossing from the Missouri River to the Rocky Mountains and similar pioneer treks in Alberta moving families and animals as recently as the 1930s. This would yield the following distance per day:

Rate: $1-2$ miles per hour
Time: $\quad 7-9$ hours per day
Distance: 7-15 miles per day

## Recorded Distances

There are five Book of Mormon events that state the number of days it took the Nephites to travel a given route. The length of these five journeys can be converted into a reasonable approximation of the number of miles traveled.

1. The one and a half-day (and later oneday) journey of a Nephite across the width of the small (narrow) neck of land (Alma 22:32, Hel. 4:7). The exactness of the time period suggests that this is a

Rate: $\quad 30-50$ miles per day
Days: $\quad 1-1 \frac{1}{2}$ days
Distance: $30-60$ miles specific distance. It also suggests that a single person would be traveling at a fast rate with minimal provisions.
2. The eight-day journey of Alma from the land of Nephi to the land of Helam (Mosiah $23: 1,3-4,19)$. The people leaving the land of Nephi were moving their flocks and provisions, thus making their travel much slower. The wilderness terrain would have been rugged and difficult to traverse.
3. The combined one-day plus 12-day journey of Alma from the land of Helam to the land of Zarahemla (Mosiah 24:20, 24-25). The people traveled one day to the valley of Alma before journeying an

Rate: $\quad 7-15$ miles per day
Days: 8 days
Distance: $50-80$ miles

Rate:
$7-15$ miles per day
Days:
13 days
Distance: 90-190 miles additional 12 days to reach the land of Zarahemla. They would have traveled at a slow rate with their flocks and all their provisions.
4. The one-day journey of the Lamanites and Nephite armies from the hill Amnihu to the valley of Gideon (Alma 2:15, 19-20). The army of Alma was fighting and chasing the army of Amalici as they

Rate: $\quad 7-15$ miles per day
Days: 1 day
Distance: 6 - 8 miles
5. The three-day journey of Alma from the land of Melek to the land of Ammonihah (Alma 8:6). Alma appeared to be traveling alone and with minimal provisions. We are

Rate: $\quad 12-25$ miles per day
Days: 3 days
Distance: 35-60 miles unable to precisely determine the location for the city of Ammonihah from the brief description in the Book of Mormon. However, the location on our maps represents the scale of a three-day journey in the Land of Zarahemla at a normal rate of speed.


Distances in days traveled, converted to miles.

When these travel conditions and rates of travel are applied to the time-spans of the five journeys noted in the Book of Mormon, we can finally calculate the approximate distance in miles between the stated locations, using our formula: miles = days $\times$ miles traveled per day. And then when the resultant travel distances are overlaid and compared to the corresponding distances within the proposed area of Baja California, we can see that in all five cases the actual distances on the ground fall well within the expected range of the Book of Mormon distances.

## The Book of Mormon Lands

We have attempted, in a straight forward and simple manner, to match many geographical items in the Book of Mormon to physical features in Baja California, while at the same time respecting the principle of Occam's razor: All other things being equal, the simplest solution is the best. In other words, when multiple competing solutions are equal in other respects, the principle recommends selecting the solution that introduces the fewest assumptions. With this principle as a guide, over 50 geographical matches have been described, from climatic characteristics to land shapes to locations of rivers, wildernesses and hills. All of these matches and findings, we feel, are plausible, and credible and even compelling.

We have drawn on the scriptures as our primary source of information and hope that our work has shed some light on the Book of Mormon as the "most correct" book. We would suggest that the reader lookup the hundreds of scripture references provided, but, best of all, to reread the entire Book of Mormon while considering the scores of scriptural connections to our proposed locations in Baja California. Our work should fit not only the words and lines of the scripture text, but also "between the lines." And it also should be an aid to understanding the gospel doctrines of salvation, correct principles of behavior, and the consequences of unrighteous choices. That is our intent. The geography of the Book of Mormon is only a means to this more important end. We hope, however, that our work will help clarify the story line of the Book of Mormon and make it more understandable. We trust there are no distortions of the scriptural text or the geography of Baja California, for such misrepresentations reflect our human failings and not our intent.

We are often asked if have any archeological evidence for our proposal. Our answer is: Yes, there are ancient records that have come from the ground. These ancient records are collectively called the Book of Mormon, which is an 1829 translation of these records describing several past cultures and civilizations spanning thousands of years. This record is even more valuable as archeological evidence now that we have been able to match many Book of Mormon places and details to actual locations on the earth. The translation of the Book of Mormon came by the gift and power of God, and we have found the book's geographical details to be correctly recorded, and in complete harmony with existing features on the earth. These ancient records are the best archeological evidence for the Book of Mormon.

Readers wishing to pursue the topic of archaeology and the Book of Mormon are strongly urged to read two chapters on the subject by Hugh Nibley, "The Nature of Book of Mormon Society" and "The Archaeological Problem," published in his work, An Approach to the Book of Mormon, and also an article in the Ensign, "Ancient Temples: What do they signify?" Nibley spells out what we should expect to find in the way of archaeological artifacts, and especially what we should not presume to find, simply because many of the anticipated items are not part of the society and culture of the Book of Mormon people. His insights and perspectives have enlightened our understanding of Book of Mormon geography.

Baja California has barely been touched by archaeologists, possibly because of its isolated location. The few archaeological investigations have yielded the expected arrow heads, potsherds, middens, and burial caves. This area also has what is considered to be the most extensive and detailed rock paintings in the world. These investigations have provided some interesting items for testing and further analysis.

May we offer a word of caution: The Book of Mormon account describes the destruction of two civilizations that were literally "swept off" the land because of their iniquity. It is difficult to say how much evidence would have survived this destruction process, coupled with the normal diminution of evidence that would have happened over the 1600 years since the end of the Book of Mormon record. We should note that the Book of Mormon is a record of people who built humble homes, cities, synagogues and temples. It is feudal and slave-based civilizations who traditionally build elaborate structures for governing and
worship, such as the pyramids of Egypt, the seven wonders of the world, or the tower of Babel. We need not look, therefore, to areas of ostentatious and extensive ruins in the Western Hemisphere to find the heartlands of the Book of Mormon peoples. In fact, the erosion of time may have destroyed the modest structures and artifacts they abruptly left behind. We have found that descriptions of their geographical settings, such as climate, plants and animals, and the relative location and scale of their lands have proved to be the most fruitful clues to their location.

Finally, there are dozens of additional geographical items in the Book of Mormon that we have investigated and matched to Baja California, but are not presented in this article, such as the use of barley as a medium of exchange, and the numerous geographical items surrounding the many wars. The account of the battle around hill Riplah, between the Nephites and the Lamanites, provides an abundance of geographical descriptions that we have matched to a specific hill. More items are scheduled to appear on our web site, along with video presentations of much of the content in this article and numerous maps of Baja California and Internet web links to the work of others. There is also an Internet web-page version of this article with direct links from the scripture references to the Church's official Internet scriptures.

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[^0]:    ${ }^{1}$ Hugh Nibley, Lehi in the Desert and the World of the Jaredites, Bookcraft, 1952; Lynn M. and Hope Hilton, In Search of Lehi's Trail, Deseret Book, 1956; and S. Kent Brown and Peter Johnson, Journey of Faith: From Jerusalem to the Promised Land, Maxwell Institute, Brigham Young University, 2006.

[^1]:    Significant locations in the Land of Nephi.

[^2]:    ${ }^{2}$ Brian D. Stubbs, "Looking Over vs. Overlooking: Native American Languages: Let's Void the Void," Journal of Book of Mormon Studies: Volume 5, Issue 1, Provo, Utah: Maxwell Institute, Brigham Young University, 1996.

