

in the early part of this chapter. Uniting with the Guadalupe in its course, their joint waters are discharged into the Aransaso bay, which by a channel opposite the mouth of this river, is connected with Matagorda bay. The advantages of water power which are presented by this river for the first fifty or sixty miles from its source, cannot well be surpassed. Its use in irrigating the soil upon its borders has been already noticed. In closing our notice of this remarkable river, we will venture to repeat a report current among the hunters on the upper settlements of the Colorado, that may serve, if true, to account for the marvellous fountains at its source. It should be remarked that the fountains of the San Antonio, spring up near the southern base of one of the spurs of the mountain range. A river of a corresponding size, is said to lose itself at an opposite point in the northern base of the mountain. This is supposed to be the identical San Antonio river which rises and flows off upon the surface, after having held its subterraneous course beneath the mountain; whether any one has yet ventured to navigate this space, so as to be able to testify to its identity, our informant saith not.

The river Guadalupe, which unites with the San Antonio some few miles above their outlet, exceeds that river in length, though its volume of waters, except when swelled by the mountain torrents in rainy seasons, is much less. Its whole course is probably little more than two hundred miles. The longest spur of the mountain range, is found running parallel to the upper waters of this river, and in many places so near as to overhang its banks, and it is here that the mountains approximate nearest to the coast. This spur subsides at the crossing of the San Antonio road, about one hundred and fifty miles from the coast. Below this, the borders of the river present extensive tracts of rich, open prairie, alternated with thickly timbered bottoms, of less extent, but little less inviting than those of the middle region.

The Neeches, which with its eastern branch, the Angelina, waters the red lands of Texas, falls into the Sabine lake, after a meandering course of perhaps two hundred miles.

## CHAPTER IV.

*Natural history—geology—botany—animals—reptiles—government—civil divisions—population—extract from Morfit's report.*

IN embodying a few facts which belong to the natural history of Texas, we shall confine ourselves almost entirely to those branches of the subject which may be denominated the useful, rather than the ornamental. In treating of these, we shall speak only of such things as serve to administer or otherwise to the comfort, convenience, and necessity of the inhabitants; neither our limits nor ability permitting a more extended notice.

The geological treasures of Texas, aside from her soil, which is believed to be such as to satisfy the most fastidious, can scarcely yet be known, there having been neither time nor opportunity to explore but a small portion of its surface, much less to search for what may be hidden beneath it. The important article of stone, or rock, a material deemed indispensable for building among civilized men, may be sought in vain in the level region of Texas. It soon appears in the beds of the smaller streams on entering upon the undulating lands, but the first specimens exhibited are generally of a friable species of limestone, which crumbles almost as easy as the earth in which it is embedded; other species soon appear in advancing interior, and at a distance of a hundred and fifty miles from the coast, there is little difficulty in finding stone of a quality suitable for building. Still nearer the mountains, limestone, fit for all the purposes to which it is any where applied, is abundant. In a few rare instances, isolated rocks, of from five to a hundred tons weight, are found within a few miles of the line of the level lands; these increase towards the mountains, though far from being numerous; perhaps a circuit of twenty miles will present but a single specimen.

In the district within twenty or thirty miles of the mountains, stone for all useful purposes may be quarried in sufficient abundance to supply the whole country. Lime can be furnished from the same district, and materials for brick making can be found almost anywhere, by removing the soil to a sufficient depth. Lime may also be manufactured along the coast, from the im-

mense deposits of oyster shells which are found in many places in almost inexhaustible quantities.\*

The mineral kingdom has attracted even less attention than the geological, and although in the neighborhood of some of the richest mines in Mexico, no anticipations of collecting the precious metals, otherwise than from the productions of the soil, appear to have been indulged by the inhabitants of Texas. If there are among them those who are inflamed with an inordinate desire of wealth, it is an agricultural cupidity, which of all others has been found the least injurious, both in its influence upon the individual and the body politic. Placed in a position where an opportunity is afforded them, to compare the results of a passion for "gold hunting," and for "land hunting," the people of Texas can scarcely fail to profit by the lesson which is so forcibly inculcated by the contrast.

The mineralogical discoveries in Texas, are such only as have forced themselves upon the notice of persons in pursuit of other objects; they must therefore form very imperfect data for estimating the mineral resources of the country. That the precious metals abound in the mountain range, is generally believed, and many tales are told, by the native hunters, of former discoveries of rich mines of both gold and silver among the hills between the Colorado river and the head waters of the Guadaloupe, and a tradition prevails, of the truth of which there can be little doubt, that a silver mine was once opened and successfully prosecuted here, until the workmen were cut off by the savages.

Coal of the bituminous kind presents itself at the surface in many places in the undulating region. Iron ore is also frequently found in the same region. It is seen in large quantities upon the declivities of some gravel knolls in the neighborhood of Mina, the upper town upon the Colorado. Copper mines have also been found unsought like the others; and the usual indications which serve to denote the presence of most of the useful minerals

\* In descending the live oak bayou, a fine navigable creek of some thirty miles in length, which falls into Matagorda bay at its extreme eastern point, the writer found on both shores, for several miles before entering the bay, an accumulation of oyster shells, in many places ten feet high; thousands of loads were visible at a glance. This creek, though now abounding with the living oyster of the most tempting size and flavor, is not yet visited by the present inhabitants of Texas for the purpose of obtaining them, and yet from the position of these shells, they must have been thrown there by those who had robbed them of their contents. It would seem that the few savages who once roamed the coast of Texas, might have feasted here for centuries. Large collections apparently thrown together in the same manner, are not unusual on the banks of the creeks and bayous along the coast, but no where else did the writer witness an accumulation like this, which appeared as if a populous city had been supplied for ages.

are not wanting, to induce a belief that the country is not deficient in resources of that kind.

To the scientific or amateur botanist, Texas presents a field unsurpassed perhaps by any portion of the earth. There are few kinds of trees, shrubs, or plants, which may not be found with all their various species, growing spontaneously in this highly favored country. Thus say the few initiated, who with unclinging delight have roamed the green fields, woodlands, and meadows, the sloping lawns, and verdant parks, prepared here by the hand of nature, and decked with all that she has of color or fragrance, waiting to be possessed by man, and wanting only the slight edifice which in this mild climate affords a sufficient shelter, to be fitted for his happiest abode.

Of the various species of forest-trees suited to the wants of a populous country, the middle region has a sufficient supply of all kinds. In the eastern, as before remarked, the supplies are redundant, but wanting in some districts of the western. The level lands of the eastern division are clothed with the greatest imaginable variety, embracing all the choicest kinds for use or ornament. All the varieties of oak, hickory, pecan, wild cherry, mulberry, ash, elm, sycamore, cypress, cedar, pine, magnolia, holly, and a long catalogue of others, which it would be tedious to repeat, are found in the greatest profusion. In the corresponding district upon the Trinity, the variety or abundance is little diminished. Farther west, upon the Brazos and Colorado, and the intervening streams, the pine, cypress, and magnolia, are wanting, and many new varieties supply their place. The live-oak is here most abundant. It is found sometimes mingled with other trees in the bottoms and cross timbers, but more commonly skirting them, or standing out from them, in open groves and sprinkled over the prairies; many of them are the growth of centuries, and have attained a size which would be deemed incredible by those who have not witnessed them. A species of high laurel, called here the wild peach, from the striking resemblance of the foliage to that of the peach, grows profusely in the bottoms, mingled however with the larger class of forest-trees excepting the elm; and the bottoms are generally found marked with alternate tracts of peach and elm, and thus they are generally designated throughout the middle region of Texas, as peach or elm bottoms. Both have been found equally productive when brought under the plough, but the peach lands are preferred on account of a greater compactness of soil, which fits them for clearing and subduing at all seasons. The wild peach is valuable also for a fruit that it produces in great abundance, of the size of the large black cherry, which is sought with great avidity by swine, and has been found highly nutritious and fattening. It comes, too, in a good

time, when the last crop of acorns within the range is nearly exhausted, and continues until the new crop begins to fall. The latter then serves to complete the fattening. The acorn, in the perfection in which it is produced here, and especially that of the live oak, as a food for swine, has been found little inferior to corn.

Red cedar is found on several of the small creeks and rivulets near the coast, and is abundant in many parts of the interior. As yet, oak and elm being always at hand on the bottoms and prairies of the low country, are most used for fence rails, and the nearest timber with little regard to its quality, has here, as elsewhere in new settlements, been used for buildings as well as fences.

We have before alluded to the natural vineyards of Texas. To all the different kinds of the grape which are found growing in the United States, may be added many choice varieties which here spring up in favored spots in the interior. Cherries, mulberries, and plums of several species, also grow wild; among the latter is a dwarf which is believed to be peculiar to the country, growing not more than three or four feet high, and bearing a very delicate fruit.

Most of the flowering shrubs, as well as plants which are cultivated with so much care in the gardens and hot-houses of the north, are offered to the admiring gaze of the traveller in the lonely forests and prairies of Texas. The deep verdure of the luxuriant herbage is almost everywhere sufficiently relieved by the variegated flowers scattered over the surface; but the admirer of nature in her gayer and gaudier colors, will find his progress sometimes arrested by a broad parterre so rich and varied, that after looking in vain for the mortal hands which could have been employed in collecting and arranging these gems of the vegetable kingdom, he will be half disposed to credit the tales of the East, and pronounce it the work of fairy hands; and the illusion will not be dispelled by finding that the worthless weed he has broken by the wayside, becomes in his hands a fragrant and precious geranium, and the matted mass under his feet, transformed into the far-famed sensitive plant, shrinking from his rude steps with instinctive life.

Even the new formed lands along the coast, while yet unclothed with herbage, are not without their ornaments. It is here the sword-leaved Palmetto chooses its abode, and displays its gorgeous central flower, surrounded by triple ranks of pointed leaves, bristling like the bayonets of a grenadier-guard.

Among the wild animals of Texas, of the ferocious kind, there is probably but a single species that may not be found in the unsettled parts of the United States, and this is the pecari, or Mex-

ican hog, an animal bearing considerable resemblance to the common swine, but smaller, and more ugly and unshapely in its proportions; when full grown its size is about half that of the common breed of swine. It is the most pugnacious, perhaps, of all animals, being seldom known to retreat, but always ready for fight, and being armed with hooked tusks of several inches in length, it is generally regarded as a very formidable adversary. In a rencounter with man it sometimes inflicts grievous, but not dangerous wounds. It has neither the size nor strength to render it a dangerous adversary, but its readiness at all times, to quarrel with whomsoever and whatsoever it meets, makes it terrible to the negroes, who will flee in troops before the Mexican hog. This animal is but rarely seen, and the presumption is, that it has never been numerous, as it never avoids a conflict with more powerful animals, which alone are willing to encounter it. Its first battle is generally its last, and the race therefore, most of them, perish early in the "field of honor."

Reports have sometimes been spread by the timid, of having seen the South American tiger, or leopard, in the forests of Texas, but the most voracious hunters of the country are incredulous of its existence there, believing that the common American panther had been mistaken for it, in the hasty glance in which the inexperienced woodsman generally indulges himself when such spectacles are presented to him in the forest. The latter animal is found here as elsewhere on the continent, retreating into the wilds as the settlements advance. The black bear, the large black wolf, the dwarf or prairie wolf, and a small assortment of wild cats, are found lingering behind the panther, manifesting a greater reluctance at leaving their old haunts.

Among the small feline race is a very beautiful species, called very appropriately the leopard-cat, being spotted with the same bright and brilliant colors as the leopard.

Among the larger quadrupeds, whose flesh as well as hides richly reward the hunter for the labors of the chase, the buffalo, the common black cattle, and deer, are abundant. The two former, however, must be sought on the frontiers of the settlements, the latter abound everywhere; large herds are often seen quietly grazing upon the prairies in sight of the plantations, and in travelling, herds of deer are as common as flocks of sheep, in a well settled country, and scarcely more timid; at two or three hundred yards distance, they will remain quietly gazing at the passing traveller, seldom retreating, unless they discover an evident intention of approaching them with sinister designs. They are seldom hunted in the open prairie, and are therefore bolder in that position than any other. A little before sunset they are generally seen returning to their shelter in the nearest wood; and at

this time the planter who is in need of a fresh stock of venison, conceals himself with his deadly rifle, in the skirts of the wood, near the track where a herd are known to return to their nightly haunts, which is generally the same through the season, and here he is nearly as certain of his prey as a farmer in New England would be of obtaining a lamb from his own flock.

The buffalo is far more shy, and uniformly leaves his old haunts wherever the settlements approximate very near. This animal may often be approached upon the prairie much nearer than deer; with a strong wind blowing from the herd, the hunter often comes within fifty yards without alarming them; showing that they rely principally upon their acute sense of smell, as a warning against danger; having the wind from their enemy they will fly his approach at the distance of four or five hundred yards.

The buffalo is easily domesticated. When taken young, and fed by the hand of man, no animal is more docile; and none fly the approach of man with stronger marks of fear and consternation, than the common black cattle in a wild state. The wild cattle of Texas are said to be numerous. They are occasionally seen in large herds by the hunter and the traveller beyond the frontier settlements, but almost always in the forests and thickets, seldom venturing into the open prairie, when in the neighborhood of the haunts of man. In the vast prairies of the northwest, or Upper Texas, they are still more numerous; several thousands are sometimes seen in a day's travel. They manifest less fear here, from being less exposed to encounter the sight of man. But it is but very seldom that the hunter can approach within gunshot of the wild cattle of Texas, and of all the species of game which roam these wilds, they are the most difficult to reach, and will probably survive all others. These animals have not strayed from the herds of the present inhabitants. It is believed that no instance has occurred where an animal has been lost in this manner from the domestic herds. Not so with the horse. It is by no means unusual for the inhabitants of the frontier to lose their horses by the seductive arts of the mustangs, and between these and the predatory tribes of savages who are the most arrant horse-thieves, it is indeed difficult for the frontier settler to keep a horse.

The mustangs, or wild horses of Texas, are supposed to be far more numerous than the wild cattle. The traveller seldom penetrates far into the interior, without putting to flight a troop of these fine animals; sometimes he will see them flying in the confusion of an absolute route, but oftener making an orderly retreat, like well-disciplined cavalry, under the direction of skilful and experienced leaders. The wild horse, when taken young, is

easily subdued, and rendered serviceable to man, but after reaching mature age it is scarcely within the art of man to break him for service. If he apparently yields, his vicious habits are sure to return, and his rider will find himself unhorsed and deserted at the moment of greatest need. The wild cattle and wild horses of Texas are most of them from a stock which have been wild for ages, originally abandoned, or lost through neglect, by the timid and indolent race of men who inhabited New Mexico.

In regard to the smaller kinds of quadrupeds, serpents, reptiles and insects in Texas, they are not dissimilar from those found in the southern border of the United States. But owing to the absence of swamps and morasses, venomous serpents and noxious insects are less numerous.

Of the former, the large and small or prairie rattlesnake, and land and water moccasin, make the whole list. The subtle venom of the rattlesnake is well known, and unless an antidote is early applied, it often proves fatal. The bite of the moccasin is said to be equally dangerous. This *on dit* is perhaps questionable, yet we confess our scepticism would not carry us so far as to test the truth by an experiment; so much is certain, however, it may be encountered with much less hazard than the rattlesnake. If it is armed with a weapon as dangerous, it has less courage and skill in using it.

The centipede and the tarantula are the only venomous reptiles in Texas, and these are both found along the whole southern border of the United States. The latter is well known to be a large spider. Its bite has sometimes been pronounced incurable; yet well attested instances of death, caused by the bite of the tarantula, are very rare, not more numerous perhaps than from the sting of the common honey-bee. The centipede is the scorpion, and the only scorpion of Texas. It is usually called the stinging scorpion, and northern travellers hearing it called by that name, are not aware that it is a reptile which is common in all parts of the United States below latitude thirty-two. Its sting is as easily cured as that of the hornet.\*

\* To those who have not seen the centipede, a brief description of it will not be uninteresting. It is about an inch and a half in length. Its head the size of a full grown caterpillar, and tapering to a point at the tail, where it carries its sting;—to inflict a wound it throws its tail over its back. It moves quickly but not rapidly, even with its *hundred feet*. When it is held fast by pressing a stick upon its back, after repeated efforts to avenge the affront by applying its sting to the wood, and perceiving them to be ineffectual, it will turn its sting upon itself, and almost instantly expire. While in this situation, it may be resuscitated by the application of a few drops of alcohol. The writer witnessed an experiment repeated several times, on one of these reptiles, thus expiring under its own sting, and as often restored to life by the application of a few drops of whiskey.

Of animals of the lizard kind, there is one species not common to the United States. It is called here the horned frog; its body bears some resemblance to the frog, but it is clearly of the lizard kind. It has protuberances projecting from the head, of about a half an inch in length, in the shape of horns. The chameleon and various other species of small lizards, may be found every where in the forests.

The rivers and brooks are well stocked with fish, such as are common in the southern waters of the United States, and the bays and bayous along the coast are stored with oysters, large and well flavored, together with such other shell-fish as are usually found in a southern latitude.

A short notice of the government, civil division, and present population of Texas, with an extract from Morfit's report, exhibiting his estimate of the population in August, 1836, will close our geographical sketch.

The present government of Texas is a republic, or more properly a representative democracy, in which the powers confided to their representatives are specified, and defined by a written constitution, which in all its essential features is but a counterpart of the constitution of the United States. Texas, however, being but a single state, to the congress is necessarily entrusted the authority to legislate for all its internal as well as its external relations.

The civil divisions are counties organized like those in the United States and towns, (not townships,) and cities.

In regard to the number of inhabitants, it should be remarked that the subjoined extract was evidently intended to sift very closely the estimates and the facts in support of them, which had been submitted to the American agent, and on which his own were based. The increase since the date of this report, is probably not far from 15,000, principally by emigration from the United States.

"The population within that territory is said to have been 70,000; but from all that I can learn, it should be estimated at about 50,000, or less. The races consist of Anglo-American, Mexican natives, aborigines, and negroes. Of these, there are perhaps 30,000 Anglo-American settlers, distributed principally between the Nueces river and the Sabine, and on the Trinidad, Colorado, and Brazos rivers; about four or five thousand of the men of this population still remain at home, attending to their farms. There are 3,500 native Mexicans, of Spanish descent, all interested in the cause of Texas. Of these, there are in the neighborhood of

Nacogdoches,	- - -	800 souls.
In San Antonio de Bexar,	- - -	2,000

In Victoria,	- - -	120 souls
San Patricco,	- - -	50
La Bahia,	- - -	500

The negroes are about 5,000 in number. The *additional* territory claimed by Texas since the declaration of independence on the 2d March, 1836, will increase her population at least 15,000, so that the state may be said at this time to contain 65,000 souls. Of this augmentation, there will be, in the village of Taos, about 1,500, in Santa Fe 2,500, in San Miguel, 1,000, and 2000 in the other settlements. There are also 8,000 souls belonging to the families of Rancheros, or herdsmen, who will add to the products, but not to the physical force of the country. The Rancheros are several, and in some instances numerous herdsmen, congregated upon a large estate, called a hacienda, generally belonging to one proprietor. Some of the Rancheros are feudal, where the land and greater profits, with certain services, are claimed by the hacendado or proprietary; others are allodial, where the herdsmen are either owners in fee, or are lessees at a rent in money or in kind, without the rendition of any personal duties. The feudal tenures are confined to the district of Santa Fe and Coahuila, and not many even there. Some of the haciendas have herds of 100,000 horned cattle, and very few less than 10,000, exclusive of mules and horses. The Rancheros themselves, of the poorest grade, have never less than 200 head. This information is derived by inquiry of intelligent men, who have traversed all that region of country, and I advert to it in order to show the resources which the newly acquired portion of territory will bring in aid of the future operations of the state, if her independence is acknowledged.

As regards the population of emigrants from the United States, they are said to be not less than 50,000, being, all those whom I have denominated Anglo-Americans. They have been coming to this country from the first grant to Moses Austin, in 1820, down to the present moment. Those who were here before the revolution were called settlers, because their objects were agriculture, trade, and commercial enterprises. Those who have come since the declaration of independence, are termed emigrants, and devote themselves in the first instance as volunteers, to secure the soil upon which they afterwards intend to fix their homes."