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MAN AND WILDLIFE IN ARIZONA:
THE PRE-SETTLEMENT ERA, 1823-1864

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by

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A Thesis Submitted to the Faculty of the

DEPARTMENT OF BIOLOGICAL SCIENCES

In Partial Fulfillment of the Requirements
For the Degree of

MASTER OF SCIENCE
WITH A MAJOR IN WILDLIFE BIOLOGY

In the Graduate College

THE UNIVERSITY OF ARIZONA

1973
Colorado River and built dugouts by scooping out cottonwood logs. With these they trapped upstream to the country of the Mohave Indians.16

Another party working the lower Gila in the same year found the current too broad and deep to ford with a horse. Therefore, they built makeshift canoes described by James Ohio Pattie, one of the members of the group: "A canoe is a great advantage, where the beavers are wild; as the trapper can thus set his traps along the shore without leaving his scent upon the ground about it."17

On reaching promising beaver country a trapping expedition usually established a base camp from which small parties or single trappers radiated out for many miles to carry on their operations. There was little ice or snow over large areas of the Southwest, so trapping continued through the winter.18 Trapping parties in Arizona consisted typically of old Rocky Mountain hands from Missouri and novices from the Southern states.19

The mountain man soon learned that Arizona beaver, the object of all his endeavors, possessed fall and winter pelts only slightly inferior to the northern variety. Since the trapping season was longer than in the Rockies, he could make up in quantity what might be lacking in quality.

16. Yount, p. 32.


18. As Morgan states (p. 163), trappers in the northern Rockies went out in large parties: 50 to 100 men. Base personnel maintained camp for trappers and hunters who fanned out into the surrounding wilds. These trappers were contract employees for the big fur companies.

In the early 1820's beaver were common throughout the drainage systems of both the Colorado and Gila Rivers.20 One group of seven trappers, working the San Francisco River in the fall of 1825, took 250 beaver in a matter of days.21 Two years later, on the lower Colorado, a party under Sylvester Pattie put out 40 traps and caught 36 beaver in one night.22

In Arizona, beavers built lodges in suitable areas, but most records indicate that burrows tunneled into the banks of rivers were the most frequently encountered form of shelter.23 The entrance to a burrow was a considerable distance below the water line, and the passage penetrated from five to 20 feet back, terminating in a home chamber several feet in diameter and above the water level. On the Colorado, beaver constructed piles of branches and poles above the chambers to prevent coyotes from digging away the roofs.24 Back entrances on land, concealed in brush and weeds, were sometimes dug.25

Where streams were shallow and flowed gently, or formed stagnant sloughs, lodges were built. The Colorado River is an example. Out on

22. Ibid., p. 129.
the main channel beaver tunneled into the soft alluvial soil of the banks, but in the backwaters away from the river lodges were fashioned from broken saplings and river driftwood. Mountain streams feeding the headwaters of the San Pedro had beaver in abundance, and this population tended to build lodges. James O. Pattie also reports having seen lodges on shallow lakes south of the Gila River, probably in the San Simon Valley.

On the Verde River, where bank burrows predominated, one beaver nest was found in the decayed bole of a tree. The nest, made of the stalks and leaves of sedge, tule, and herbaceous plants, interwoven with dry leaves and fine rootlets washed bare by the stream, was in an area where a pool had undermined trees along a jutting bank.

Beavers characteristically built dams across small rivers, forming a series of deep pools. On streams in southeastern Arizona, such as the San Pedro River, these pools often spread out to help maintain extensive grassy marshes.


in 1825. The objective: Taos. Over the next two years Pattie explored all of the Southwest from the Rio Grande to the Colorado, went on three expeditions into Arizona, and may have been the first American to see the Grand Canyon.

Pattie has been taken to task by historians because his chronology was sometimes questionable. But Reuben Thwaites, who interpreted and edited one widely read version of the Personal Narrative, was more responsible than Pattie for incorporating geographical inaccuracies. With matters of geography straightened out, much of Pattie becomes "straightforward and plausible," in the opinion of anthropologist Alfred L. Kroeber. Another summing up comes from historian Robert G. Cleland, who felt that Pattie's diary gives an "authentic, overall picture of the early days of the fur trade in the extreme Southwest and a true account of some of its dramatic incidents...His descriptions of the country...are also too accurate and detailed (as the author can attest from personal observation in many instances) to be based on borrowed accounts of spurious experience."  

Operating in all likelihood under a license obtained by Sylvestre Pratt, an expedition led by Sylvester Pattie left Santa Fe in November, 1825, and started south down the Rio Grande (see Fig. 1, p. 222). The group of seven men had agreed to head for the unknown wilderness of the Gila drainage rather than follow more familiar routes north out of Taos or on south into the mountainous country of northern Sonora and Chihuahua.


Somewhere along the Rio Grande several more trappers doubled the size of the party, and at a point four days below Socorro they all struck west for the Santa Rita copper mines, leaving behind the thin band of riverbank settlements that comprised Mexican civilization in the Southwest. At the copper mines, which had been first worked by the Spaniards around the turn of the century, the expedition hired two Mexican guides and pushed on northwest to the headwaters of the Gila River, in what is now Gila National Forest. This was probably the first group of Americans to reach the Gila, 56 but James Ohio Pattie mistakenly believed that no other white men had ever visited the region. The Spaniards had known the area for a long time, and in 1757 one Jesuit missionary made note of "beavers which gnaw and throw to the ground the alder-trees and cotton woods." 57 However, the Spaniards did leave the Gila drainage as they found it—the same wilderness that the Patties observed.

The expedition soon fell into a pattern that was to hold on all future journeys: the two Patties always stuck to large permanent streams in their search for beaver (on their first night trapping the Gila the party caught 30 of the animals). James Ohio Pattie remarked on the beauty of the river near its head, where it ran swiftly between banks covered with tall cottonwoods and willows. Grass grew luxuriantly over

56. Dale Morgan believes that Jedediah Smith may have been the second American to lead an expedition into Arizona (Jedediah Smith and the Opening of the West, Indianapolis, 1953, pp. 193-200). While looking for the legendary Buenaventura River, alleged to lead to the Pacific, Smith descended the Virgin River to the Colorado early in 1826. He did not find many beaver, but he did pioneer a new route across the Mohave Desert to the California missions.

57. Weber, p. 112.
the timbered bottoms. On the adjacent mesas Pattie noticed an open woodland of scattered oaks, juniper and pinyon pines.

Along one stretch of the upper Gila, the mountain men passed a number of grizzlies, but left them strictly alone, since the bears also seemed willing to mind their own affairs. However, there were places where bluffs came to the river's edge, and the men often had to scramble through dense underbrush and grapevines. "Added to the unpleasantness of getting along in itself," commented Pattie, "we did not know, but the next moment would bring us face to face with a bear, which might accost us suddenly." 58 This fear stayed with the expedition while they pushed through the tangled bottomlands, but no dangerous encounters occurred.

One evening, while scouting the lower reaches of a small tributary, James Ohio Pattie was overtaken by darkness and had to make camp alone in a region where grizzly sign continued to be abundant. The night's events formed part of his diary:

I placed a spit, with a turkey I had killed upon it, before the fire to roast. After I had eaten my supper I laid down by the side of a log with my gun by my side. I did not fall asleep for some time. I was aroused from slumber by a noise in the leaves, and raising my head saw a panther stretched on the log by which I was lying, within six feet of me. I raised my gun gently to my face, and shot it in the head. Then springing to my feet, I ran about ten steps, and stopped to reload my gun, not knowing if I had killed the panther or not. 59

58. On the way to New Mexico with Pratt's expedition, James Ohio Pattie wounded a grizzly that had attacked the company's livestock one night outside camp. The bear mauled one of the trappers to death before Pattie killed it with a second shot. Grizzlies were so abundant on the Arkansas River that Pratt's men counted over 200 in one day (Cleland, p. 164).

59. Pattie, p. 49.
This incident, the first on record involving a mountain lion in Arizona, describes its characteristic curiosity and set the tone for man's future relations with the species.

As the trappers worked their way down the Gila they shot a few deer (species undetermined), but in general they seemed scarce. The season of the year was at fault, in Pattie's speculation.

Near disaster now occurred. Owing in part to a lack of coherency and discipline within the company, seven men deserted and trapped ahead on the river. They operated with such thoroughness that they virtually exterminated the beaver on a considerable stretch of the upper Gila in a few weeks. 60 By January 1, 1826, the remaining members of the party were close to starvation. Beaver meat sustained them for a while, but soon it became as unavailable as the larger game. For four and a half days, before the group reached the mouth of the San Francisco River, they had nothing to eat but part of a rabbit caught by the dogs.

At the San Francisco their luck changed. The river flowed southwest through an open forest of ponderosa pine interspersed with meadows. Wildlife appeared in abundance: waterfowl on quiet beaver ponds, wild turkeys, white-tailed and mule deer, Merriam elk, and bear of both species. 61 There was mountain lion sign, and on the rugged cliffs that came down to the river Pattie saw "multitudes" of bighorn. "These animals are not found on level ground," he said, "being there

60. Cleland, p. 173. While skillful trappers, the mountain men were often ruthless and short-sighted. It was usual to aim for the maximum number of pelts in the shortest time possible.

slow of foot, but on these cliffs and rocks they are so nimble and expert in jumping from point to point, that no dog or wolf can overtake them. ... Their meat tastes like our mutton." 62

Because the deserters had trapped out the Gila ahead of them, the Pattie company turned northeast up the San Francisco. They took 37 beaver the first night, an omen of good fortune that held true where trapping was concerned all the way to the river's headwaters in the Mogollon Mountains. Wild turkeys were particularly numerous on these upper stretches of the San Francisco, and several were shot by the party.

Near the source of this river the seven men in the company cached some 250 beaver pelts taken in the two weeks or so since they left the Gila. It was the middle of January, 1826, when they struck overland to the southeast and once more came to the Gila River. At one point, after the mountain men had started downstream, several horses disappeared in a snowstorm, and Pattie joined a search party that tracked them after the storm subsided. They followed the trail up a creek that emptied south into the Gila somewhere east of modern Clifton. Pattie spotted bear sign at a cave at the base of a cliff near the creek. Holding a pine torch, he entered the cave and shot a grizzly that was bedded down for the winter dormant period. It took several men to drag the bear out. In Pattie's words, "It was both the largest and whitest bear I ever saw. The best proof, I can give, of the size and fatness is, that we extracted ten gallons of oil from it. The meat we dried, and put the oil in a trough, which we secured in a deep crevice of a cliff, 62. Pattie, p. 51.
beyond the reach of animals of prey. We were sensible that it would prove a treasure to us on our return.\textsuperscript{63}

A few days later, farther along the river, Pattie noted tersely that the company "killed a bear, that attacked us." The animal was undoubtedly a grizzly.

In March the trappers worked their way up a semi-permanent stream joining the Gila from the south. They called it Beaver Creek because in a short time they took 200 pelts and loaded the pack horses to their limit. Pattie noticed this stream valley near its confluence with the Gila as being covered with cottonwoods and willows. Flanking the flood plain was a foothill region containing a strange plant which he described in some detail: "A species of tree, which I had never seen before, here arrested my attention. It grows to the height of forty or fifty feet. The top is cone-shaped, and almost without foliage. The bark resembles that of the prickly pear; and the body is covered with thorns. I have seen some three feet in diameter at the root, and throwing up twelve distinct shafts."\textsuperscript{64} Pattie, unmistakably, is discussing the saguaro cactus. He later referred to lofty, snow-capped mountains rising beyond the valley.

This account of what is now known as the San Pedro Valley vindicates James Ohio Pattie as a basically accurate chronicler. No other stream flowed north to the Gila with the following combination of features: (1) it was semi-permanent, with a dependable flow of water all

\textsuperscript{63} Pattie, p. 54.

\textsuperscript{64} Ibid., pp. 62.
on the east. These must have been the Galiiuros, which would have been anything but balmy in March. Since the party complained of the lack of water, the crossing was probably made well south of Aravaipa Creek.

The trappers descended the eastern slope of the Galiiuros and came out onto a broad, grassy plain. This, in all likelihood, was the northern end of the Sulphur Springs Valley, which is dry today, although Pattie made a vague reference to the presence of water at that time. The company stopped for a while, and Pattie shot a pronghorn. His entry reads as follows:

Here we encamped the remainder of the day, to rest, and refresh ourselves. The signs of antelopes were abundant, and the appearances were, that they came to the water to drink; from which we inferred, that there was no other drinking place in the vicinity. Some of our hunters went out in pursuit of the antelopes. From the numbers of these animals, we called the place Antelope Plain. The land lies very handsomely, and is a rich, black soil, with heavily timbered groves in the vicinity.67

Continuing eastward, the party crossed another high range, which, if Pattie's itinerary remains accurate, would have to be the Grahams. The mountain men then halted briefly to trap a shallow lake for beaver, to which they were attracted by the gabbling of ducks and geese. The exact location of this lake is difficult to ascertain, but the north end of the marshy San Simon Valley would be a logical area, assuming that the expedition had not yet reached the Gila River.

Having regained the Gila, probably near the site of modern Safford, the Pattie expedition headed straight for the Santa Rita copper mines. The journey was a difficult one, and the trappers once again came close to starvation; at one period they were reduced to eating

ravens and turkey vultures. James Ohio Pattie left his father at the mines in April and returned to Santa Fe to requisition horses and supplies for another trip to the Gila, this time to reclaim the pelts buried at two caches. The expedition reached its objectives, but only a few furs were recovered from the cache on the San Francisco River, and the larger cache on the Gila had been broken into and stolen, presumably by Indians. Financially broken, the Patties settled for the next few months at Santa Rita, where they attempted to work the mines.

During the summer of 1826, the influx of trappers and traders into New Mexico continued undiminished. However, business in Santa Fe was at a standstill owing to an excess of foreign goods and a lack of capital among local merchants. William Becknell's great caravan of 1824 had drained the hard cash out of New Mexico. Consequently, many traders could not sell their goods, and some of them joined trapping expeditions to recoup their fortunes.

That autumn, at least four groups of trappers—some 90 men all told—headed into the Gila River country, carrying passports issued by Governor Narbora, who was lenient about enforcing the decree of 1824. One of these was a party of French Canadians led by a seasoned mountain man named Michel Robidoux. In or about September, 1826, James Ohio Pattie joined this assemblage at the Santa Rita copper mines and accompanied them on a trapping venture down the Gila all the way to the mouth of the Salt River. Here, despite Pattie's remonstrances, Robidoux

68. Becknell's caravan to Santa Fe in 1824 consisted of the following: 83 men, 156 horses and mules, 35 wagons, and 30,000 dollars' worth of merchandise (Yount, p. 7).
camped at a Papago village whose inhabitants showed more evidence of treachery than the hospitality they at first professed. Pattie and one other trapper withdrew for the night some distance away. Their fears were realized; the Papagos massacred the entire party except for Robidoux himself, who escaped, badly injured, into the darkness. He eventually stumbled into the hiding place that concealed Pattie and his companion, and the three men successfully evaded the Indians.

An incredible piece of good fortune now befell them. The next night the three fugitives spotted the campfires of an expedition of thirty trappers under Ewing Young. They were made welcome and accepted the chance to continue trapping as part of the company.

Young's party had descended the Gila just behind Robidoux, and George Yount, one of its members, remembered at least two anecdotes involving wildlife. At some point in the gorge country of the upper Gila, probably just east of the Peloncillo Range, Yount referred to a stream named Hog Creek for its abundance of javelina. This may have been what is now called Apache Creek, but the location could just as well have been farther east into New Mexico. One evening, an apparently rabid wolf entered Young's camp on this creek and bit several dogs before being shot.69

After reaching the Salt and picking up the massacre survivors, Ewing Young exacted a successful revenge on the Papagos: his company killed most of the warriors in an ambush, then burned the village. They now settled down to the routine of trapping beaver, working their way up

69. Yount, p. 28.
the Salt and Black Rivers to the head of the drainage in the Blue Range. Pattie found the whole region "to abound with beavers." His associates agreed; in fact, for the period between the 1820's and the 1840's, the mountain men regarded the Salt River as the most consistently productive beaver stream in Arizona.70

Reunited once again at the confluence of the Salt and the Verde, Young's company descended to the Gila, which they trapped all the way to its mouth. They were probably the first Americans to reach the Colorado River by this route. As a good-will gesture, the mountain men gave beaver meat to the Halchadom Indians, who farmed corn between the Yuma and Mohave tribes.

It was now sometime in the spring of 1827, and the expedition turned north up the Colorado. On the stretch of the river below Black Canyon, the lagoons that flooded the bottomlands supported a high population of beaver. But the Mohave Indians resented the Americans trapping in their territory, and they had to weather a series of bloody skirmishes before escaping upriver. With a lull in the fighting, there was time for hunting, and in Pattie's words, "We killed plenty of mountain sheep and deer, though no bears."71 This occurred in the vicinity of Black Canyon, where the mule deer was the only representative of its family.

After passing the Mohave villages, the company stopped in the area of what is now Lake Mead. The trappers investigated the washes and

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70. Cleland, p. 172.

71. Pattie, p. 87.
stole all their horses, and the mountain men had to compensate by hollowing out two cottonwood logs to serve as canoes. All the pelts and supplies were loaded into the dugouts, and the expedition proceeded downriver. They hoped ultimately to find a Mexican settlement in the delta of the Colorado, but meantime they worked energetically "to trap the river clear," as Pattie phrased it. Sometimes the trappers brought in as many as 60 beaver in a morning.83 The river became circuitous, with many islands on which they set beaver traps with consistent success. Southward, the gallery forest on the banks comprised larger timber than farther upstream, being less of a jungle. And Pattie remained alert to the fauna around them:

There are but few wild animals that belong to the country farther up, but some deer, panthers, foxes and wildcats. Of birds there are great numbers, and many varieties, most of which I have never before seen. We killed some wild geese and pelicans, and likewise an animal not unlike the African leopard, which came into our camp, while we were at work upon the canoe. It was the first we had ever seen.84

The last animal described probably represents the first mention in literature by an American of a jaguar in the Southwest. It is unlikely that ocelots were ever recorded this far west, but the possibility cannot be ruled out.85 The "panthers" Pattie mentions refer to

83. Pattie, p. 130.

84. Ibid., p. 131.

85. As late as 1922, Aldo Leopold in Sand County Almanac (New York, 1966), p. 143, states that the jaguar still prowled the dense tangle of mesquite and willow that separated the delta channels from the thorny desert beyond.
"mountain" price of three dollars, which remained constant between 1823 and 1833. Meanwhile, trade in horses, equipment, and provisions at Taos alone amounted to some 50 or 60 thousand dollars a year. When the authorities attempted to interfere with this trade by confiscating furs and merchandise, American traders retired to the interior beyond the reach of Mexican law and established fortified posts like Bent's Fort on the Arkansas River. Trapping and trading operations, largely geared to exploiting one natural resource—the beaver—diverted so much potential revenue from Mexico that to a degree the Southwest became an American economic colony long before the Mexican War.

With the growth of the China trade out of England and New England, the world market in beaver began to break. The early 1830's witnessed the clipper ships bring silk in great quantities to manufacturing cities everywhere. Fashion changed, and silk was now offered for hats instead of beaver. After 1831, as trappers began to rely on intermontane trading posts as markets for beaver, and as the fur trade itself showed the first indications of decline, there was a slight advantage in an American becoming a Mexican citizen in order to trap legally. This trend changed even more drastically within the decade. With beaver fading out of the economic picture, many former trappers took up trading entirely.

As the era of the Taos trappers waned in the 1830's, two events came to dominate mercantilism in the Far West. One was the preeminence of the stationary trading post, and the other was a correlative rise in the demand for bison hides. For three decades after 1832 buffalo became the most sought after animals in North America. Few Indians had ever
trapped for beaver pelts, but buffalo robes were readily available through trade with the plains tribes. This made it possible for the fur trade to be carried out at strategically located fixed posts.

Economic decline was not the only reason that trappers were beginning to disappear from the Gila and Colorado drainages. As early as the period between 1829 and 1831, problems with hostile Indians had become so acute that mountain men on their way to California were already circumventing Arizona by following the Old Spanish Trail through Utah.

Parts of the upper Gila were an exception to the general situation. Some Apache bands in that region actually extended protection to beaver trappers, in part because the Americans brought trade goods in the form of arms and ammunition. But all this changed during the season of 1836-1837, when the bottom had nearly dropped out of the market anyway. American bounty hunters, seeking Apache scalps to turn in to the Mexican authorities, killed a number of friendly Indians, including a chief. From then on, no trapper was safe on the Gila.

Until the outbreak of the Mexican War, a few hardy adventurers continued to trap beaver in Arizona. The market price for pelts was low, but beaver had made a good recovery from the peak trapping years, and this handful of romantics had the field to themselves. In the season of 1840-1841, for example, mountain men found the trapping particularly good on the upper Gila. Game was abundant; bear meat and venison were dependable staples.  

In 1846, when George Frederick Ruxton passed through New Mexico, he noted that "beaver has so depreciated in value within the last few years that trapping has been almost abandoned." 97 Beaver were then commanding 90 cents a pound in the southern Rockies.

The trappers who worked the rivers of Arizona left little impact on the land. But their mark on history is impressive. In the process of harvesting the beaver, they blazed a system of trails that linked New Mexico with the missions of San Gabriel and San Diego. A vast, unsettled region was opened to trade and enterprise. The basin of the lower Colorado was explored and a way prepared for its occupation by American forces. They showed, above all, that southern California was accessible to overland pack trains and that it need not remain isolated behind mountains and deserts.

wildlife at all, though Emory commented on the abundance of deer and beaver sign. Wolves were also spotted on several occasions. 1

Emory was not the only literate observer on this expedition. James M. Cutts recorded seeing immense numbers of Gambel's quail on the bottoms of the upper Gila. 2 Of the river itself, Abraham Johnston, a member of the First Dragoons, had this to say: It was "a beautiful mountain stream about thirty feet wide and one foot deep on the shallows, with clear water and pebbly bed fringed with trees and hemmed in by mountains, the bottom not more than a mile wide. The signs of beaver, the bear, the deer, and the turkey, besides the tracks of herds of Indian horses, were plain to be seen on the sand." 3 An army surgeon, John S. Griffin, commented on the abundance of deer and turkey tracks and the elusiveness of the animals themselves. He quoted Kit Carson as saying that he never knew a party not to leave the Gila in a starving condition. 4 A few days later Griffin did see some ducks and geese on the river and heard that the artist John M. Stanley had shot two turkeys.

One member of the column who kept a particularly detailed journal was Henry Smith Turner. He was impressed by the continuous cover of good grass along the river, plenty to sustain the mules. Turner also found

1. William H. Emory, Notes of a Military Reconnaissance (Washington, 1848), p. 64.


4. John S. Griffin, A Doctor Comes to California (San Francisco, 1943), p. 25.
much evidence of wildlife along the upper Gila: not only Gambel's quail and turkey, but signs of deer, beaver, and bear. Nevertheless, the expedition's hunters did not bring in much game.

Farther downriver, as the canyon deepened, Dr. Griffin continued to notice deer and turkey tracks, but saw no game except Gambel's quail. Abraham Johnston got a look at the lower stretch of the San Francisco River when the Army of the West reached its confluence with the Gila. He reported a large number of beaver dams on this mountain tributary, with "flags and willows along the borders very thick," and majestic cottonwoods on the banks.

Just past the mouth of Eagle Creek on the Gila, Turner entered in his journal some facts about the Gambel's quail: "A portion of our route today abounded with the partridges peculiar to this country—never were partridges so numerous as in this—in the distance of half a mile we must have seen today from 800 to 1,000."  

At some point beyond the junction of the Gila and the San Carlos, Lt. Emory made note of the presence of javelina. He remembered that the Graham Mountains were distinct against the sky to the southeast. "Last evening about dusk (Oct. 29)," the entry reads, "one of my men discovered a drove of wild hogs....The average weight of these animals is about 100 pounds, and their color invariably light pepper and salt. Their


flesh is said to be palatable, if the musk which lies near the back part of the spine is carefully removed.\textsuperscript{8}

For a short distance early in November Kearny struck southwest away from the Gila and came to the lower San Pedro, which the dragoons followed to its mouth. Dr. Griffin recalled that another name for the San Pedro was Hog River, because of the abundance of javelina on its well-wooded flood plain. In Emory's journal the valley of the lower San Pedro is described as being wide, with a dense growth of mesquite, cottonwood, and willow, "through which it is hard to move without being unhorsed."\textsuperscript{9}

Back on the Gila, just west of the mouth of the San Pedro, Johnston also saw javelina in the dense riparian thickets.\textsuperscript{10} Lt. Emory jotted down his impressions of this part of the Gila, the date being November 7. The expedition observed "Flights of geese, and myriads of the blue quail, and flocks of turkies, from which we got one....The river bed, at the junction of the San Pedro, was seamed with tracks of deer and turkey; some signs of beaver and one trail of wild hogs."\textsuperscript{11}

For Lt. Emory, one of the most absorbing aspects of the journey was an opportunity to study the ruins of twelve ancient Indian towns, as well as abandoned irrigation systems. These investigations convinced him that no direct connection existed between the Pueblo cultures and the Aztecs and Mayas to the south.

\textsuperscript{8} Emory, p. 69.

\textsuperscript{9} Ibid., p. 75.

\textsuperscript{10} Johnston, p. 593.

\textsuperscript{11} Emory, p. 78.
Near the mouth of the Salt River, the expedition rested and traded among the Maricopas and Pimas, now peaceful farmers who grew crops of corn and cotton, planted to exploit seasonal overflows on the river bottoms. In the middle of November Kearny resumed the march down the Gila. Dr. Griffin observed that below the Salt the Gila River was about 80 yards wide, three feet deep, and rapid. Waterfowl teemed: ducks and geese of several species, and whistling swans.\textsuperscript{12} Beyond the great bend, Lt. Emory referred to the river bottoms being "wide, rich, and thickly overgrown with willow and a tall aromatic weed." The Gila was covered in places with waterfowl, particularly snow geese, which Emory called "white brant," with black-tipped wings. Signs of mule deer and beaver were everywhere, and one member of the party shot a buck in the stream-side thickets.\textsuperscript{13}

In what is now western Maricopa County, Turner noticed that the Gila was becoming much more like a real river. The width varied from 100 to 150 yards wide, with an average depth of four feet—"quite deep enough to float a steamboat." It flowed gently over a sandy bottom, while the banks, in Emory's terminology, were fringed with cane, willow, and myrtle. Farther on, at Painted Rocks, in modern Yuma County, Kit Carson shot a bighorn ram. Johnston remembered that the face of the mountain came close to the river bottoms, and that a flock composed entirely of males clambered with great facility up the cliff. Emory's notes state that the column named the site "Goat's Spur," after the

\textsuperscript{12} Griffin, p. 25.

\textsuperscript{13} Emory, p. 91.
expedition) moved him through the influence of whiskey, to leave the harmless deer, antelope, turkeys, etc. unmolested."

The dragoons somehow retained their coherence for the rest of the journey, but not without some difficult periods. On the Gila River, about 100 miles above its junction with the Colorado, Couts made the following entry in his journal: "If the game and fishing on the Rio Gila abounded as represented by the pop-gun stump speakers and demagogues of our fair and glorious Republic, the scarcity of provisions would not alarm us but every man who can hunt or fish, and I flatter myself as good if not the best in the command, is constantly out, and enough for one meal is doing remarkably well." Couts went on to observe that the Gila was running like a "wild torrent" over its extensive sand bottom and had overflowed to form "a great number of lakes, ponds, lagoons & c. and nothing else." Although this was written on November 8, no mention is made of the abundant waterfowl reported two years earlier by members of the Kearny expedition.

The Mexican War, which ended with the Treaty of Guadalupe Hidalgo, provided for the cession of Mexico's northern holdings to the United States for 15,000,000 dollars. All of Arizona north of the Gila River was included in the terms. Ratified on July 4, 1848, the Treaty necessitated a long and difficult boundary survey project, initiated a year later.


29. Couts, p. 72.
States paid Mexico ten million dollars for the area that includes most of Arizona south of the Gila River, giving final delineation to the present international boundary.

With the expansionists in Washington satisfied, the next step was to survey the best route for the proposed new railroad. Lieutenants John G. Parke and George Stoneman received this assignment, with orders to run the 32nd parallel across southern Arizona. In January, 1854, they started, working from California to Fort Yuma, then east up the Gila to the Pima villages. The surveyors followed a cut-off version of the emigrant trail called Nugent's wagon road, which led to Tucson, angled southeastward to the Chiricahuas, crossed the salt playas of New Mexico, finally linking up with Cooke's old wagon road as it led south after leaving the Rio Grande (see Fig. 4, p. 225).

In the spring of 1855 Lt. Parke again surveyed the 32nd parallel between the Pima villages and the Rio Grande. This time he located a new pass between the base of Mount Graham and the Chiricahuas. He was accompanied by a naturalist, A.L. Heermann, who had also gone along on the first expedition. However, Heermann's observations were largely limited to a cataloguing of specimens. He did make note—like so many before him—of the incredible abundance of Gambel's quail along the Gila and in the Sonoran Desert. The birds seemed to actually prefer the haunts of man, being common along roads and in cultivated fields, particularly around Tucson.65 He also observed that the scaled quail was not seen west of the mouth of the San Pedro. On the grasslands of

southeastern Arizona the species preferred the vicinity of prairie dog towns, where the vegetation was thinned out, perhaps, in his words, offering "the attraction of some favorite insect." 66

Lieutenant Parke made some observations of the Gila River as it appeared in 1855. Near the Pima villages it formed a broad plain, much of which was covered with dense groves of mesquite. Upstream, at a point just west of its confluence with the San Pedro, the Gila occupied the entire bottom of its gorge, spreading out in places to a width of 50–100 yards. There was ordinarily a single channel, but side drains created sloughs in seasons of rain or snow melt. The water was clear and palatable, flowing with a moderate current over an alternating bed of sand, pebbles, and rock. In July, the stream was 20 feet wide and 12 inches deep near the mouth of the San Pedro. As on the lower Gila, the banks here were fringed with cottonwood and willow, with mesquite at the base of the terraces. 67

The surveyors moved up the San Pedro Valley and found the terrain and the river anything but uniform. In places the valley was grassy and open, with inviting meadows. The bed of the river curved through these open bottoms, sometimes a few inches below the level of the meadow, at other places much deeper. At Tres Alamos Parke found the stream 15 inches deep and 12 feet wide, flowing rapidly over a light, sandy bed beneath nearly vertical banks some 15 feet high. 68


68. Ibid.
west from New Mexico to Tucson by way of Apache Pass, and a third from
Albuquerque to Zuni, continuing southwest across the Mogollon Plateau
to the Gila River.

Fewer people took the Gila Trail than the Platte-Humboldt route
across the Great Plains, perhaps due, in part, to the reputation of the
Apaches. Yet the southern course had advantages. There were not as
many mountains to cross, and although the weather was hot in summer there
were no winter blizzards to contend with. In 1849 alone more than 9,000
Americans followed Cooke's route, and according to one record, about
60,000 emigrants crossed southern Arizona in the years 1849-1851 (see
Fig. 5, p. 226).

Most emigrant parties were large; therefore there were few
brushes with Indians. But families and small groups were often attacked.
Herds of cattle, gathered in south Texas, were driven with some of the
wagon trains, and despite the rigors of the journey surviving animals
bought 100 dollars a head on the hoof in California.

Like Cooke before them, the first forty-niners to cross Guadalupe
Pass found wild cattle still abundant. Owen Coy, an emigrant in one of
these early parties, wrote that the beef provided by the wild bulls was
as important to travelers on the southern route as buffalo were to the
wagon trains crossing the Great Plains.4 Forty-niners often stopped for
several days in the San Bernardino Valley in order to replenish their
larders with fresh meat. The bulls were as dangerous as Cooke's men found
them, especially to hunters on foot, but they were far more conspicuous
and easy to hunt than the numerous deer and pronghorn. Possibly for this

undisputed possession. It must be a miserable race that could deliver up
such a valley, with its delightful climate."

There were places on the upper San Pedro that supported a good
stand of riparian growth. Cottonwoods predominated in the gallery forest,
indicating the direction of the river for a long distance, but there were
also sycamores, willows, and mesquites. 10 This part of the valley varied
in width from one to four miles, with "stunted oaks" growing in the foot-
hills of the nearby mountains.

On May 27 Clarke made the following entry in his journal, after a
day following the upper San Pedro:

Three of the men attacked a grizzly bear last night on the other
side of the river. They felled him three times, but their
ammunition gave out. He was running towards one of the men,
whose gun was yet loaded with buck shot, when coming very near,
he let it blaze into his face, when they all ran, the men in one
direction and the bear in another; this was the last that they
saw of him. In the morning, they went out again, and tracked
him by his blood some distance. 11

Following the established route down the Santa Cruz River, Clarke
and his companions reached Tucson, then braved the heat of the Sonoran
Desert in early June to drive their wagons to the Pima villages. He made
the following observation of the Pima and Maricopa communities along the
Gila River: "Nearly the whole of the Gila is drawn off by sequias for
irrigating the land, which is laid out in little squares, with sluices
between, to admit the water from the sequias." 12

10. A.B. Clarke, Travels in Mexico and California (Boston, 1852)
pp. 82-83.
11. Ibid.
12. Ibid., p. 92.
To save time, the company crossed a stretch of waterless desert at the base of the big bend of the Gila, arriving back on the river at noon on June 9. On the way, Clarke saw the weathered horns of a bighorn lying on the slope of a hill, probably in the Maricopa Mountains. 13

The wagon train cleared the bend country two days later, heading downstream somewhere near the present boundary between Maricopa and Yuma Counties. Clarke made this observation of the river: "The river was at this place a quarter of a mile wide. The volume of water at times must be immense, as there is brush and other substances lodged in the mesquites from ten to twenty feet high, through the adjoining plain, over which we have been traveling." 14 He also noticed that the river on June 12 did not occupy more than a quarter of its bottom, the remainder consisting of a deep bed of sand, baked so hard and cracked so deep that it was difficult to estimate the depth of the fissures. The river banks were generally low along this stretch, the bottom being covered with alluvial soil from the periodic overflows. There were scattered heaps of driftwood and a dense growth of weeds, but no grass. 15

In places, sunflowers from eight to 10 feet high grew in extensive clumps, giving the appearance of cultivated fields. Other flowers, of various colors, grew in profusion, and a narrow line of cottonwoods marked both sides of the river. Gambel's quail were everywhere, running in large flocks through the weeds or under the heaps of driftwood. 16

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13. Clarke, p. 95.
15. Ibid.
the course of a dry arroyo about three miles." 22 The mule deer escaped, in part because Harris discovered some Indian pottery shards protruding from the earth, the archeologist in him taking precedence over the hunter.

Downstream, the Gila continued broad and shallow until it passed the northern end of the Gila Mountains. Here, the emigrants went swimming, since the water was waist-deep. 23 Harris took the time to notice that "millions of blue quail inhabited near the water."

Harris' company crossed the Colorado without difficulty, being towed on rafts by swimming Yuma Indians. The river in early summer was swollen with snow water, deep and cold, and about 500 yards wide.

Back up the Gila, near its headwaters in what is now Gila National Forest, another party of forty-niners was just getting under way in July on the trail taken by Stephen Watts Kearny and the Army of the West. Like many mountain men twenty years earlier in this region, these emigrants did not have much luck on hunting excursions. Diarist Robert B. Green, a Pennsylvanian, reported talking to one of the company on his return to camp: "Capt Dixon just shot a wolf & says 'Green I shot the wolf but by God I could not get the deer,' game is very scarce no ins- gins today but lots of mockasin tracks." 24

Near the junction of the Gila and San Pedro Rivers, Green expressed his discontent thus: "There is no game worth mentioning along

22. Harris, p. 84. The old mesquite bosques no longer exist along this stretch of the Gila. The sandy bed of the stream is indicated by a few cottonwoods.

23. Ibid., p. 85.

this river, no country, no people, no timber, no fresh water no grass, & no comfort."25 On the lower Gila, beyond the big bend, things began to look up. "Saw 3 old fashioned deer today the 1st in a great while." Once again, if the point needs to be made, it is apparent that on the Gila River the larger game animals were spotty in their distribution and not a dependable source of food for large parties.

Another chronicler of the Gold Rush, George W.B. Evans, seemed particularly interested in landscapes. When the Defiance Gold Hunter's Expedition, of Defiance, Ohio, reached the middle Santa Cruz River in modern Santa Cruz County, Evans thought they were in the most beautiful valley he had ever seen. "All kinds of wood grows on the hillsides," he wrote, "and fine towering cottonwoods mark the course of this river."26

When Evans' party reached the Pima villages on August 22 he recorded his impressions of the adjacent stream: "The Gila River opposite our present camp is a deep, narrow, and rapid stream of warm, muddy water, the banks covered with a dense growth of wild willows and weeds, tall cottonwoods, and the low willow tree, known as the water willow."27 It was late in the summer rainy season, and Evans may have been observing the Gila just below the point where the Salt River comes in from the east. He goes on to comment on the fact that grass was found on the high benches several miles to each side of the river, but none down in the bottoms

25. Oliphant, p. 66.


27. Ibid., p. 153.
columns on the natural history of the Santa Cruz Valley and even farther afield. An entry for March 10, 1859, reads thus: "Quail begin to be very abundant in the wooded valleys and dry beds of streams, and in the Santa Cruz Valley there are plenty of turkeys; it is about time also for grizzly bears and rattlesnakes." 33

On April 7, the newspaper quotes an unnamed army officer who had just arrived from Fort Yuma. Speaking of the Gila River near its junction with the Colorado, he says: "The river bottoms are wide, rich, and thickly overgrown with willows and a tall aromatic weed, and alive with flights of white brant (wings tipped with black), geese, and ducks, with many signs of beaver and deer." 34

Two entries for June 2, 1859, are particularly dramatic:

All the past week great fires have been raging along the western slope of the Santa Rita mountains, extending sometimes to the tallest peaks. At night the scene was grand—a vast illumination of the mighty hills—the fire in circles, in long lines, in scattered patches, and glowing in the distant horizon like the watch-fires of a great army—The entire western slope of the mountains has been burned over, and the fires are now working over and around to the eastern side, making at night a strange and beautiful spectacle. 35

Events related to the fires now follow:

Several grizzly bear have been killed by persons working in the timber regions of the Santa Rita mountains, and the fires that are now raging in the canons will have the effect of driving


34. *Ibid.*, v. 1, no. 6, April 7, 1859

Fig. 1 Trapping Routes Along the Main Beaver Streams of Arizona