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**Crossing the River:
Ferries and other Small Boats in Arizona**

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Before our modern railway and highway bridges were built and before some of our rivers only held water in unusual times, crossing an Arizona river could be a challenge. Rivers like the Santa Cruz could almost always be crossed on foot or horse, but the Colorado River often had to be crossed by raft or boat. The Gila River was usually fordable at many spots, but when the flood waters came, crossing the river could be hazardous.

Why did people want to cross the rivers? Some of them were in a hurry to reach the gold fields, some were conducting business and others were doing things like delivering the mail. And some crossed the river (or went down it) to explore or just for adventure. We have records of boats and/or ferries on the Colorado, Gila, San Francisco, Salt, Verde River, Virgin, and several other rivers. Helen Seargeant describes crossing the Salt River during a stormy season.

"Freighting in those days of rough roads without bridges, presented some difficult operations at times. Between Maricopa and Phoenix both the Gila and Salt Rivers were to be crossed. My father ... told us how on one occasion, when he was lucky enough that only the Salt was in flood, he was able to hire teamsters and equipment to haul his freight from Maricopa to the Salt River, where he got Indians to ferry the goods across the river in canoes - then he moved it from there to Prescott..."¹

Another traveler was not so lucky.

"Deputy Assessor Ivans, who is taking the assessment in the northern portion of the county met with an accident in which he nearly lost his life. About two weeks ago, in crossing the Virgin River when it was high, his buggy was caught in raging waters and overturned. The horse became unhitched from the buggy and reached the shore safely. The buggy, a \$300 one was wrecked and the contents swept away, all the blanks and books of assessment were lost..."²

The First Arizona Boaters

It seems likely that our pre-Hispanic predecessors had too much sense to try to cross rivers in flood, but they regularly crossed the Colorado River and traveled along it in a variety of crafts when it was navigable. Some Spanish explorers wrote about being helped across the river by the Quechan, Cocopah, Mohave and other people along the river. Some Spaniards arrived in seagoing sailing ships which were not easy to handle on the Colorado. Other came by foot or horse and needed help crossing. One of the early Spanish names for the Colorado River was the Rio de las Balsas because of the many balsas or rafts they saw there.

A Quechan vessel is described: "Large pottery vessels were also used to ferry goods and children from one bank to the other, the swimmer pushing this receptacle in front of him." This vessel is elsewhere described as about four feet wide.³ We have to marvel at their ability to fire such large ceramic vessels. A more common vessel was woven from willow twigs into a basket shape and

waterproofed with "a bitumen-like substance. Smaller baskets were lined with plant sap and the larger ones were probably lined with sap as well.

More conventional vessels were rafts made of reeds or logs. A little farther south along the Sea of Cortez the Seris had highly sophisticated and beautiful reed rafts, similar to rafts along the Pacific coast and down into South America. ⁴ In a pinch, rafts were made of agave stalks. We know that both bundle-type rafts and flat rafts were in common use. One source talks about the Mohaves regularly rafting both up and down the river from present-day Needles to the Gulf. Godfrey Sykes described a variety of craft on the Colorado, including the watermelon seller. ⁵

Along the Pacific coast all the way to Alaska and on the rivers, rafts were used as well as dugout canoes usually made of the pine and fir trees. There were few trees appropriate for dugouts in Arizona, but dugouts are described occasionally. All of these boats were in use in Hohokam times, but there is almost no evidence of Hohokam use of boats, except for one unsubstantiated reference to a canoe found in a Hohokam canal in Phoenix. ⁶ There is good evidence of Hohokam trading with the Pacific coastal tribes through the Quechan in the present-day Yuma area and others. They must have been familiar with rafts and/or canoes despite the lack of archaeological evidence.

The First Anglo River Crossings

The next foreigners to want to cross the river were fur traders who occasionally built rafts or canoes, but more often built bullboats. These resembled the Irish coracle and were originally made of one bull buffalo hide. Adjustments had to be made outside of buffalo country. A young girl made the trip from Idaho to the Gulf of California with her trapper father in the early 19th century. She described crossing the Colorado River somewhere upstream of the Virgin River:

"But there was the river and to cross it there was not a bit of standing or drift timber wherewith to raft. We killed two horses, made a canoe of their hides and landed safely over. By a long search we found willow enough to make an osier frame for our skin canoe sufficiently strong for our purpose."⁷

They killed two more horses for another boat on the return journey.

In 1867 some troops of the U.S. Cavalry had a mysterious adventure crossing the Verde River.

"Quite a number of the animals had already died of hunger and exhaustion, when the Verde River was reached at a point where it must be crossed, but could not be forded. A raft of large size was made of dry cottonwood poles, and when put into the water floated as lightly as cork. The raft was partly laden with canvas packcovers and other buoyant articles, and two men started with it for the further bank. The water was as smooth as glass, not a ripple disturbing its surface, and the current apparently sluggish. When about in the middle of the stream there was a cry from the men, an opening in the

surface of the water, and the raft went down bow foremost, never to be seen again. The men swam to shore, but neither the freight nor a stick of the raft ever came to surface, or was seen again, although the stream was carefully examined for some distance below the scene of the wreck. The disappearance of that raft is a mystery for which no rational explanation has even been offered. Another was built, launched at a different place, and started upon its journey, but secured this time by guys made of lash ropes, which were carried to the farther bank by men who stripped to the buff, notwithstanding the falling snow, and waited, naked, on the other side until their clothing was brought to them."⁸

When the first Anglo travelers wanted to cross the Colorado River, Indians were ready to help them cross for a price. The Quechan first welcomed the fur traders whom they saw as allies against the Mexicans and their traditional enemies the Maricopas, but experience quickly dimmed their welcome. The ferry business at Yuma eventually became so lucrative that Anglos quickly took over by force of arms, leaving the natives with the business of crossing cattle and horses while the Anglos crossed the people and their goods.

The Mohaves ferried people across in the Needles area, but travelers weren't always willing to pay the price and built their own rafts. They cut so many trees to build rafts that the Mohaves became infuriated at the heedless folk who cut down trees so important to the Mohaves and then used them one time only.

In 1854, however, the Mohaves had a good laugh when the Ives expedition crossed the Colorado River somewhere near present-day Needles in the first inflatable boat documented on an Arizona river. Balduin Mollhausen's description of the crossing is priceless, as is his drawing of the boat itself.

"Lt. Ives had brought with him from Texas a canvas boat, which being packed with greatest care, had now traveled in safety to the place of its destination, the great Colorado of the West. The craft consisted of three long canvas bags, connected together and lined inside with gutta percha, so as to be perfectly airtight. By means of a bellows fitted to them, and with some ingeniously contrived screws, it was pumped full of air, the frame of the small waggon which exactly fitted it placed on it, and the sacks drawn up at each end..." They got the boat afloat after considerable trouble and rigged up a system to pull it across with ropes. "Some of [the Indians] came floating down on little rafts made of bundles of rushes... Every time the boat came in or went off, the Indians hailed the event with wild yells of glee. By degrees they learned the simple mechanism in use, and placed themselves in a row to pull at the rope, making the empty boat fly back like lightning over the water, in the performance of which feat it several times happened that it upset and arrived bottom uppermost. Once this occurred when it had a full cargo. ..."⁹

Ferry Boats and Toll Roads

By the 1860s steamboats were plying the river, but they did not handle all the regular crossing traffic. Ferry boats appeared along the river from Lee's Ferry to Yuma. Some of them were rickety boats with short lives while others were substantial vessels that lasted for many years. The ferry boat

operators played an important role until bridges were built at significant spots, usually very near the ferry crossing because it was the best location.

The ferry boat operator sometimes also built the toll road and thus controlled traffic and perhaps even commerce far beyond the river crossing. The relationship between ferries and toll roads was recognized in the first laws the legislature enacted after Statehood where Title 50 Transportation has a section entitled "Toll Roads, Bridges and Ferries." Those who built toll roads had quasi governmental powers extending to the right of eminent domain for condemning land for the road. The government, however, had the right to take over the toll road if it wasn't properly maintained. The Mohave County Miner reported in April 1895:

"A.J. Longstreet and Michael Scanlan are going to build a toll road from St. Thomas to Hackberry. Leaving St. Thomas the road will go through Grand Wash, striking the Colorado at the mouth of Wallapai Wash, where a ferry will be established. ... The road will pass through Lost Basin and close to Gold Basin and be a great benefit to that section of the country and it is claimed that the longest distance on the road without water is only twenty-one miles. The road can't be built too soon."

Ferry boat operators such as Daniel Bonelli sometimes became wealthy as they commanded not only the crossing but provided goods and meals to travelers. His crossing where the Virgin River meets the Colorado was important in linking the Mormon communities in Utah and Nevada with Mormon communities along the Salt and Gila Rivers. He eventually ranched and farmed many acres on both sides of the river and retired to Kingman a wealthy man. This crossing was finally drowned with the filling of Lake Mead in the 1930s, isolating Littlefield, Arizona from the rest of the state. People in Littlefield today can only reach the rest of Arizona by going through Nevada or Utah.

Not all ferry boat operators were so successful. Scanlan apparently wasn't very successful and sold his ferry in 1895 to W.H. Grigg who was cited for delinquent taxes in 1897. The crossing continued to be referred to as Scanlan's ferry for many years afterwards, despite change of ownership. In 1916 it was William Sweeney who was granted a franchise to operate a ferry at that spot and to collect tolls, under the new Arizona laws.

Thomas Steen had a competing ferry upstream from Bonelli's. A notice in the Mohave County Miner for April 29, 1883 stated:

"Thomas Steen, who is running a ferry across the Colorado at the old Pierce's ferry wishes us to state that the reports circulated by interested parties to the effect that he had lost his boat are untrue, and that he is prepared to ferry anything and anybody across the river at any time."

Ferries farther downstream were very useful for travelers going to and from California. Ehrenberg was founded at the site of Bradshaw's Ferry and for 10 years experienced a boom serving mining communities. 1863 The Yuma and Needles crossings were heavily used and so well located that they were eventually replaced by bridges and railroads. The Mohave Miner reported that Wilkinson's ferry was doing a "good business" in April 1895, but by May Wilkinson had "quit keeping his ferry at the Needles and is now in Kingman." Many ferries were short lived, making it difficult to trace them all. In November 1915 E.F. Addis admitted failure in a Mohave County Miner ad:

"FOR SALE - Owing to failing health I desire to sell cheap for cash my unfinished ferry boat at the mouth of El Dorado Canyon, including new cable of the best make."

In 1931 another operator was offering travel on the Kingman-Hoover Dam-Las Vegas Highway crossing El Dorado Canyon at \$1.00 per vehicle, probably using the same road alignment.

In 1929 a man named Brown started ferry service between Cottonwood Valley and Searchlight. "This boat is one of the largest that has ever been used at that ferry and as it will cut off a large mileage between Kingman and Las Vegas it is sure to be largely used." Brown also operated a ferry below the international line and at Blythe until the new bridge put him out of business. In 1934 you could cross the river at Needles for \$2.00 per car or \$.25 on foot. In 1862 William Rood started a cattle ranch at the later site of Cibola. The ranch served as a rest stop (Rood's Ranch) and provided ferry service.

In one cross-country auto race, the ferry played an important role, but could only transport one vehicle at a time. It is unclear how this affected race times. Nellie Bush operated a fleet of ferries commemorated in a painting and sent the governor an invitation to visit.

Even in recent times ferry boats have been used to take tourists to the Nevada casinos. When in August 1985, a bridge was proposed to serve the casino crowd, one of the supporting arguments used was that the ferry population had grown so large that the network might have to close down for safety reasons.¹⁰

The Yuma crossing of the Colorado was busy for many years and several different ferries operated at different locations upstream and down stream There were at least two ferries across the lower Gila River near Yuma. The Dome ferry was used for many years. We know little about the Redondo Ferry, except for a notation on a survey map, but we know that Jose Redondo was an important person in Yuma history, mayor of Yuma and that he owned a large ranch along the Gila.

At least three ferries operated in the Salt River Valley - Hayden's at the present Mill Avenue bridge and two less well-known ones in the Phoenix area. In 1883 John Smith and nine others incorporated the Gila and Salt River Ferry Co., with a capital of \$2,000. The Phoenix Daily Herald reported that a big wire

cable for that ferry was begun on Jan 25, 1886.

The Gila River could usually be forded at low water, especially after it had been dewatered by dams and irrigation diversions, but at flood time a ferry was necessary. When the floods really raged even the ferries could not cross the river. Maricopa Wells was considered the "hub" of transportation in Arizona in the 1850s, with the spokes leading to the towns of Tucson, Yuma, Phoenix Village and Fort McDowell. A few years later it was the main place to cross the Gila River on the road between Prescott and Tucson. Because of its strategic location, the town boasted a flour mill and storehouse with grain purchased from the Pimas who had large farms nearby. It is described as one of the few stage stops that had better food than beans and bacon. When the river was "up" Henry Morgan's ferry was an important transportation link. After the road and highway bridges were built the ferry wasn't needed, but when the bridges collapsed, rescue boats were quickly found.

The Gila River near Florence offered a real challenge at high water. One early traveler talks about her ordeal.

"The stage was drawn by four horses that galloped along until we reached the Gila River where the drive stopped and the passengers, all men but myself, got out of the stage and got into a boat with which I was no more acquainted than I had been with the burro. The driver asked me 'Don't you want to get in the boat?' 'Isn't it safe in the stage?'... 'Oh, yes, I suppose it's safe enough.' he replied.. and I thinking that they were giving me choice of pleasures remained in the stage.... The river was very wide there and in the middle of the stream the water came up so high that I had to put my feet up on the seat, where the water lapped at the edge... That was the last time even a boat could cross the Gila for five days." 11

The river narrows between Winkelman and Florence, offering big problems at flood time. During the big 1905 flood, Thomas Weedon, editor of the Florence Blade Tribune, described getting across the river at Kelvin with a wry sense of humor, referring to such dignitaries as the "Captain of the Gila Fleet" and his boat the "Gila Queen." 12 The paper reported on April 3, 1905 that the Florence Commercial Company had transported over 8,000 pounds and several passengers on the previous day. Sometimes when the bridge was out at Maricopa Wells, travelers would get off the train and travel to Phoenix by way of Florence, using the Gila Fleet. Unfortunately, I have not found any photos of these boats. There is a much later photo of Governor Hunt crossing the Gila to reach the Florence Prison about 1917. Apparently this was not an unusual way of reaching the prison because the Blade-Tribune's account of the Governor's visit does not mention the ferry ride.

A cable ferry took people across the Little Colorado River at Sunset Crossing, with the men providing the muscle power and the women enjoying the ride. A ferry across the Verde River at Ft. McDowell was also kept busy at high water, but offered some hazards.

"An accident happened yesterday at the crossing of the Verde at Ft. McDowell that came very near to being fatal. As Captain Adams was bringing Mr. Van Rankin across the river the guide rope of the ferryboat broke and the current being very swift, the boat immediately turned over and continued to turn over. Capt. Adams, being a good swimmer struck out for the shore, but Mr. Rankin was entirely unable to swim. He clung to the boat, however, and climbed on top of it each time it turned over and was finally rescued by those on the bank when he had been swept some 400 yards down the river. He lost a fine Winchester rifle, a saddle, some blankets, etc. some \$60 worth in all, but is thankful to escape with his life."¹³

Homemade Boats

Arizonans used a great variety of boats, often homemade. Do-it-yourself books gave instructions for a great variety of small boats from duckboats to more elaborate craft. The foot-paddled boat was not terribly practical. The Sears and Wards catalogs also offered a variety of small boats for hunting and fishing.

Godfrey Sykes, one of Arizona's self-taught adventurer-scientists, built boats from his own design to explore the Colorado River and the Salton Sea. A boat house at the base of Tumamoc Hill served as the shipyard, but he more commonly built his boats on site. For several years he took his family for lengthy summer trips along the river. Here is his description of building a boat at the Salton Sea.

"...I shortly thereafter found myself camped alone on the shore of the still filling "Salton Sea," building a large and commodious sailing boat for botanical and eremographic investigation. ... I had designed and was building the craft sufficiently commodious to provide ample space not only for an unknown number of explorers, but also for the usual load of specimens, botanical and otherwise... I rigged her with a single large sail, a sprit-sail, and equipped her with a lee-board in order that she might be worked to windward if the occasion arose. She was of course flat-bottomed for making mud landings..."¹⁴

His brother Stanley, a kindred spirit, built a canvas boat which he floated (a bit of an exaggeration) in the winter from Phoenix to the Colorado River about 1893. Some excerpts from his description in the Coconino Sun (Sept. 7 1945)

"It was a good boat with a light frame, canvas covered. We gave the canvas a good coat of white lead and oil, sold our burros and were ready to start.... There wasn't enough water to float the boat with us in it, but by walking along each side and helping the craft over the shallower places, we managed to make some progress.... This kind of thing kept up for some days until we reached the Gila, and from then on had a little better going. There was not what could be called too much water, even here, but most of the time one of us could stay in the boat..."¹⁵

Another boat attempted the same trip, but foundered somewhere around Gila Bend. At least one

group did make it all the way from the upper Gila to the Colorado, amidst great adventures. One daring group made a similar but shorter trip down the Salt River from the site of Roosevelt Dam to Phoenix. Boats were in common use along the Salt River in the Phoenix area and along the canals. One of the more bizarre trips by peculiar homemade boats was described at length, but tongue-in-cheek, by the Arizona Republic.

"Official Log of Capt. Jacob Shively's Recent Expedition. A short time ago there was given in these columns the story of the launching of a mysterious craft from the Phoenix shipyards. It sailed west from this harbor under command of Captain Jacob Shively, admiral of the Gila River fleet. Later it was announced that the vessel had safely run the blockage of the Buckeye dam and was continuing on its voyage regardless.... [Shively himself said] 'We got a good early start and at about 7 o'clock we were capsized without any time to think till after we were under the boiling waves. I tried to get a hold of the boat but the waves put me under ... this is no place for me. I got nuff of river...'"¹⁶
(This is only a very brief excerpt from two long articles).

The need to explore the Grand Canyon led to important innovations in boat design. John Wesley Powell's first boats were not well suited to conditions on the river. A lone trapper named Nathan Galloway revolutionized Grand Canyon boating in the 1890s with a new style of boat ideally suited to one-person river running. He also introduced a new style of rowing, much more efficient in the Grand Canyon, in which the rower faced the rapids rather than rowing backwards as was traditional up to then. Later he was employed by Stone and others to modify his design for use by several men, with water-tight room for supplies. The Galloway-Stone style became the model for Grand Canyon boats for many years.

Recreational Boating

When the railroads and bridges were built and dams backed up water in lakes, boating in Arizona changed character. The Colorado River steamboats went out of business as did many of the ferries, although a ferry was the only link across Roosevelt Lake for several years for people going to Young and other points north. Boating started to become more of a recreational activity than a necessity.

People had boated for recreation, of course, long before this time. The lake behind Walnut Grove Dam was a popular recreation spot during its short lifetime before the dam collapsed in 1890. Granite Dells near Prescott was another popular boating area in the early 1900s. Lake Mary near Flagstaff was advertised as a boating recreational area in Arizona the State Magazine in 1910. A tourist boat plied Roosevelt Lake in the early years and people also fished in the lake.

By the 1940s boating as recreation surpassed, boating as exploration or transportation. The Nevill family led commercial boating trips starting in the 1930s on the San Juan River from their home in Mexican Hat, Utah. Invention of artificial rubber during World War II revolutionized running the rapids.

Natural rubber could be used for boats as on the Ives expedition, but it deteriorated in sun and water and was not dependable. Neoprene, the new substitute stood up well under difficult conditions. The first rubber rafts were small and difficult to steer, but new designs turned river rafting into what it is today.

By 1959 recreational boating had become so common that the legislature added a new section to the statutes requiring boating registration and controlling such activities as boating while intoxicated. This time, however, boats are not under the transportation section of the statutes, but included under Title 5, Amusements and Sports.

Completion of Glen Canyon Dam in 1964 so changed the character of the river through the Grand Canyon that river rafting changed from a very hazardous undertaking to one that was relatively safe for tourists. Rafting also took hold on the Salt, Verde and Gila rivers and occasionally the Virgin. Development of new materials for canoes and the transformation of the Inuit kayak from a skin boat to a plastic or inflatable craft accelerated the use of boats for fun.

No study of boating would be complete without mention of motor boats. By 1900 automobile engines were adapted for use on boats and gradually engines more adapted to boats were developed. In 1905 William Sweeney put a gasoline-powered engine on his ferry north of Needles. Gasoline-powered rescue boats were in use on ocean coasts by the U.S. Rescue Service (later the Coast Guard) by 1900. Motors were difficult to use in sandy or muddy rivers, however. Murl Emery, an enterprising young boatman, invented the tunnel-stern boat which made use of a long pipe under the boat to filter out sand so it didn't clog up the motor. He had a thriving business ferrying workers and dignitaries to the Hoover Dam site in the 1920s and 1930s. After the dam was completed he ran tourist boats for many years.

Today we not only have powerful speedboats and water skiers, but personal watercraft zipping around our lakes and light sailboats even on small lakes. It is often said that Arizona has more boats per person than any other state. While we do have a lot of boats and marinas in landlocked places like Tucson, we probably do not set the record, since the kinds of boats to be registered vary in different states and Arizona requires registration of the smallest boats while states like Michigan do not.

An understanding of the history of boating helps us understand aspects of Arizona history - the history of the native Americans, the explorers, the travelers, the adventurers, the miners, the settlers, the hunters, and the people with leisure time. Knowing about ferry locations tells us a lot about why roads were built where they were and gives us clues to other activities in the area. Three interstate highways cross the Colorado River at the approximate location of the old ferry crossings. Few people think of Bradshaw and his ferry as they cross the Colorado River on I-10 just about where his ferry ran more than 100 years ago.

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