

INSTITUTE OF CURRENT WORLD AFFAIRS

KWC-15
8 April 1984

c/o American Institute of
Yemeni Studies
P.O. Box 2658
Sana'a, Yemen Arab Republic

IN THE LAND OF SHEBA

by

Kenneth W. Cline

The Juba Valley hides its secrets well.

The isolated, sparsely-populated wadi is perched on North Yemen's eastern frontier, some 135 miles from the capital of Sana'a. This is where the mashriq, the eastern slope of Yemen's lofty central highlands, slides gently into the sandy pool of the Ramlet Sabatein desert.

The sand laps at the protecting walls of the valley's encircling gray mountains. Blowing through an eastern pass, it disperses in the shape of an opening fan to dust a portion of the bleached valley floor with orange.

The other mountain defences hold firm. Within the shelter of the bleak volcanic rock, some 39 square miles of wind-blown and sun-tortured soil manages to nourish a miserly, hardscrabble agriculture. One dreary large town and a dozen small villages spot the valley.

The Wadi Juba is not, one might think, a likely site for a complex and rich civilization.

But the sand and silt accumulated over the past 2,000 years hide the ruins of past grandeur. A team of American archaeologists working in the wadi is slowly peeling away this veil of obscurity.

Expeditions sponsored by the American Foundation for the Study of Man (AFSM) have found the remains of an ancient, pre-Islamic city covering about 25 acres and evidence of an extensive irrigation system existing in the wadi throughout the first millenium B.C.

In February, a nine-person expedition completed the foundation's third season of work in the Wadi Juba. Since 1982, the AFSM has spent some \$80,000 surveying the area, digging archaeological probes, and copying ancient inscriptions.

These Americans are the first archaeologists to undertake a systematic study of the valley. Having no previous scholarly work to build upon, everything they do represents a pioneering effort. But that's part of the joy of working in the Wadi Juba.

"There is something exciting about going into the unknown and making some sense out of it," said William Glanzman, the expedition's pottery specialist.

The AFSM's Juba Expedition marks the foundation's return to Yemen after a 30-year hiatus.

Kenneth Cline is a Village Reporting Fellow of the Institute studying village life in North Yemen.



Some of the Juba Expedition members. From left to right, they are; Abdu Ghaleb; William Glanzman; Marny Golding; Jeffrey Blakely; and Michael Toplyn.

Under the direction of its founder, explorer Wendell Phillips, the AFSM spent several months during the winter of 1951-52 excavating at Marib, the most famous of South Arabian archaeological sites. This expedition encountered intense hostility from Yemeni officials at Marib.

Conditions deteriorated to the point where Phillips feared for the lives of his men. Slipping out of their camp one morning, the Americans fled across the desert in their trucks, leaving behind a quarter of a million dollars in equipment. Camel-mounted Yemeni soldiers following in hot pursuit almost intercepted the archaeologists racing to the safety of British-controlled South Yemen.

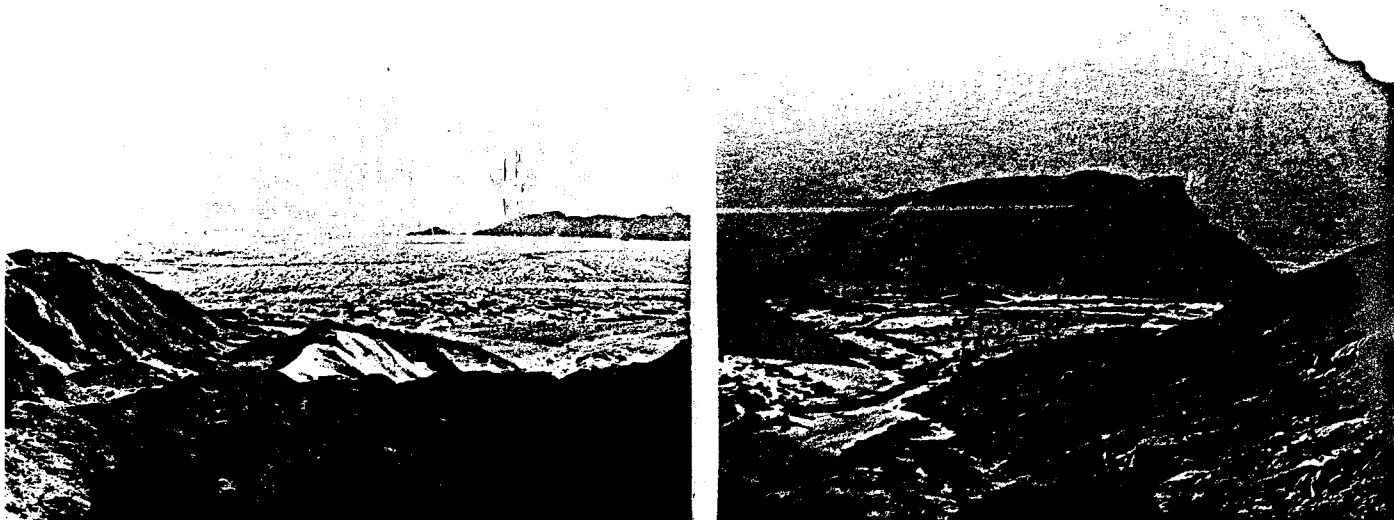
The AFSM scholars now working in Juba, which is only about 20 miles south of Marib, frequently run into Yemenis who remember Phillips.

A feisty old man told the archaeologists he had been one of the soldiers entrusted with watching over Phillips's men at Marib. He complained bitterly that Phillips had "stolen the moon."

The Americans scratched their heads over that remark. They suspect that the old man was referring to Phillips's excavation of the Temple of Awwam near Marib. This was the house of worship for a pre-Islamic moon god.

All seems to be forgiven now -- at least by the people who matter. Sana'a University and the North Yemeni Department of Antiquities strongly support the AFSM's work in Juba. The Americans have permission to continue working there until 1986.

Yemeni government officials have even indicated that



Ancient spice caravans journeying to Palestine from South Arabian ports had a choice of two routes in covering the 40 miles between Wadi Harib (site of a pass on the North Yemen/South Yemen border) and Marib. They could cross the forbidding Ramlet Sabatein desert (seen at left from a Juba mountain peak), or they could travel through the shelter of the Wadi Juba (at right, the Jarashah Pass leading to Marib from Juba). Scholars agree that the second choice was, by far, the most likely.

the AFSM might be allowed to return to Marib. The ghost of Wendell Phillips — he died in 1975 -- would be pleased.

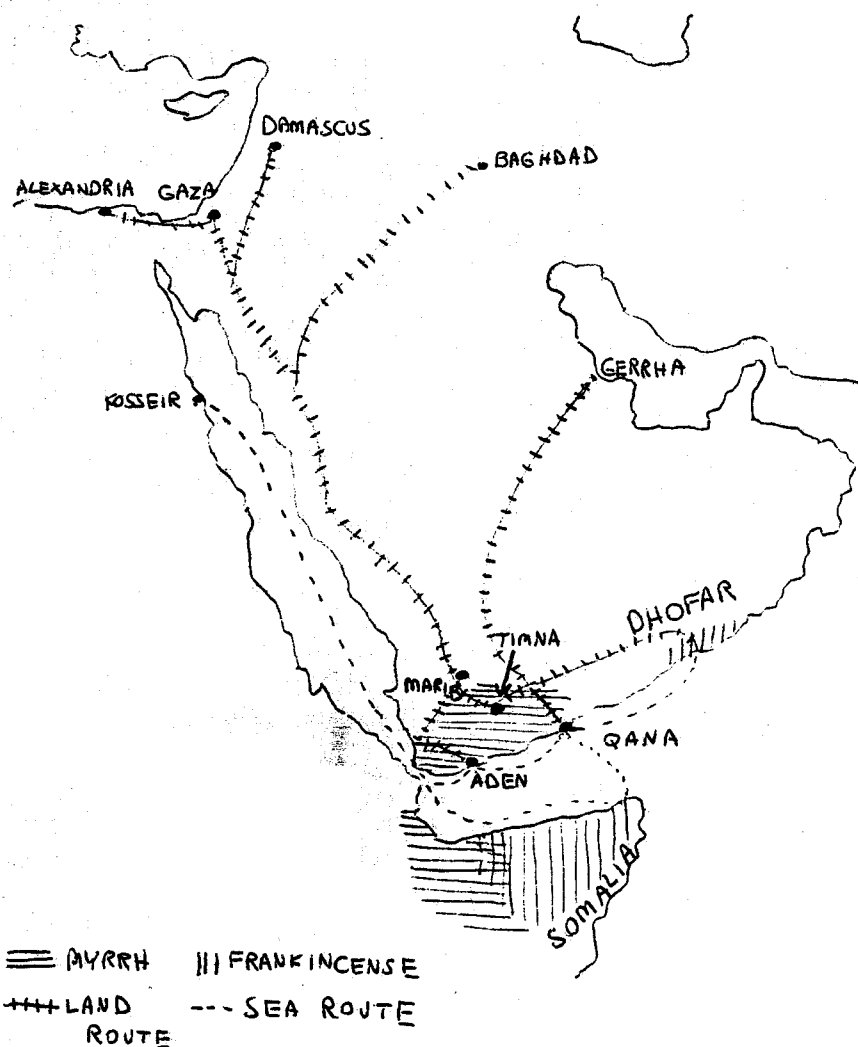
* * *

For hundreds of years, scholars have identified the Biblical Queen of Sheba as the ruler of the South Arabian empire of Saba, centered at Marib. This view has come under fire in recent years. Recent scholarship suggests the famous queen, known to the Arabs as "Bilkis," was the ruler of a North Arabian state.¹

However that may be, she certainly was a historical figure of importance. The Bible records the scene in the 10th century B.C. when the queen arrived at King Solomon's court in Jerusalem. She came at the head of a great caravan "with camels bearing spices, a large amount of gold, and precious stones."

In the popular imagination, this Biblical description is linked with the famous spice road of ancient Arabia. Once again, romance might have to surrender some ground to revisionist scholarship. It is unlikely that camel caravans regularly journeyed between south Arabia and Palestine in King Solomon's time. It probably took a few more hundred years before the trade was in full swing.

The spice trade was to ancient Arabia what petroleum is to the modern countries of the region. For more than 1,000 years, camel caravans originating in South Arabian ports carried to the



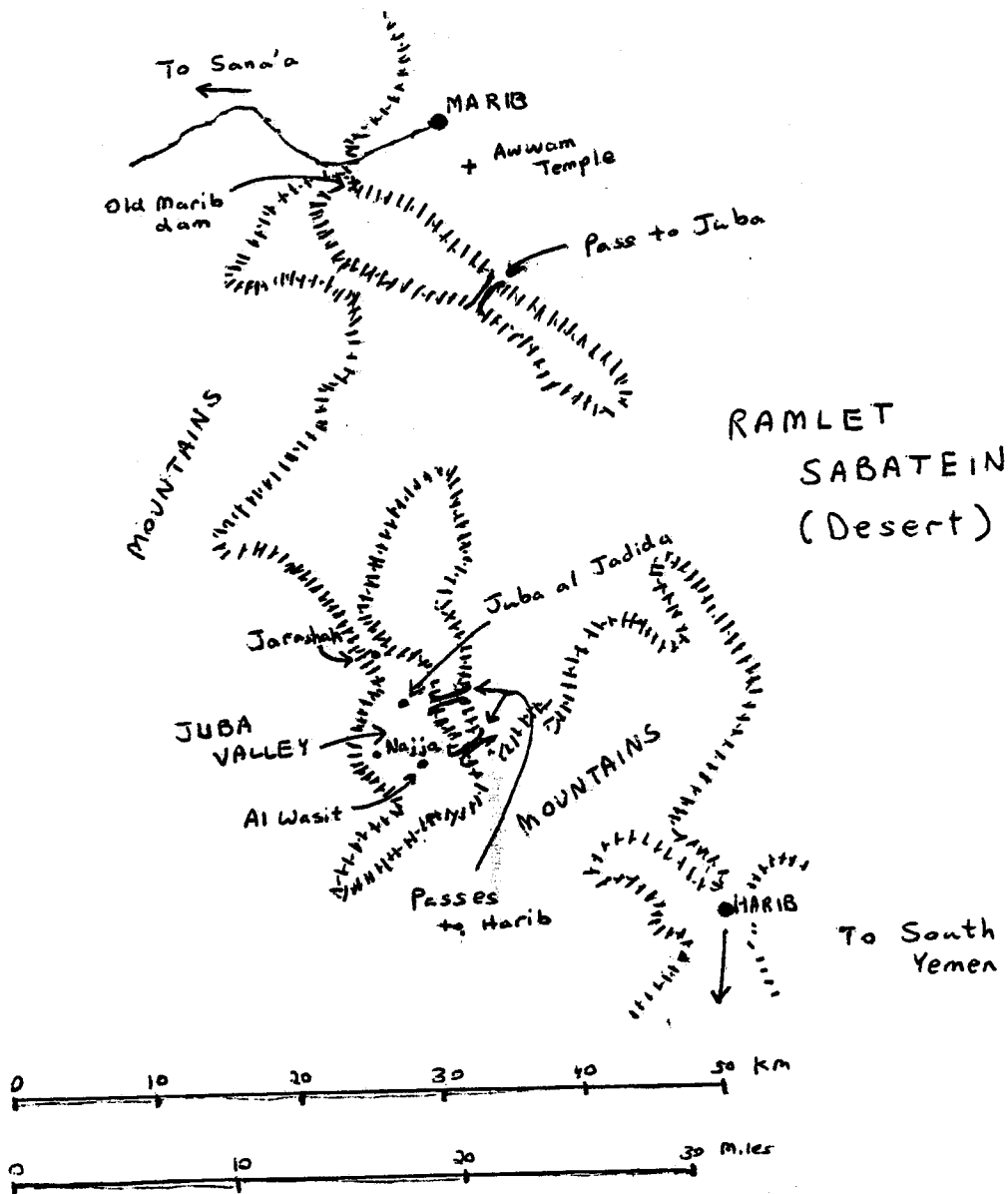
entrepots of Palestine a variety of products desired by the ancient Egyptians, Persians, Greeks, and Romans. The 1,700-mile journey probably took about 85 days.

Frankincense and myrrh, two resins extracted from South Arabian and East African trees and used as incense in religious ceremonies, fetched a particularly high price. From the beginning to the end of the spice route's history, frankincense and myrrh constituted the heart of the trade.

At different periods in this history, the caravans also picked up items deposited in South Arabian ports by eastern merchants. These included Chinese silks and dyes; fabrics and swords from India; Southeast Asian spices; and ivory, slaves, and animal skins from Africa.

Settlements along the route grew into great cities by taxing the caravans and by selling supplies to them. Marib is the most famous of these cities.

Timna, capital of the ancient empire of Qataban, was another major stop on the spice route. This city is located about



35 miles south of the Wadi Juba in South Yemen. A Phillips-led AFPSM expedition excavated Timna in 1950.

The fact that Juba is roughly midway between Marib and Timna and was heavily fortified encourages project director Jeffrey A. Blakely to believe it was on the spice route.

"There is a good chance that at least part of the spice route went through Juba," said Blakely.

But so far, the archaeologists have been frustrated in their efforts to prove this theory.

"The type of 'easy' evidence we need, such as coins, is not available," said Harvard graduate student Michael Toplyn. Coinage does not appear in South Arabia until about the 3rd century B.C. Even then, it is rarely found at ancient sites in the region.

But evidence from a written source gives a possible



The Juba Expedition's project director, Jeffrey A. Blakely, takes a look through the team's surveying instrument while surveyor Niki Clark, a Washington University in St. Louis graduate student, takes some notes. They are working on top of the mound, or tell, that covers Juba's ancient city.

clue to Juba's ancient commercial importance.

Pliny the Elder, a Roman writer of the 1st century A.D., provided a list of South Arabian peoples. He mentioned a tribe known as the Gebbanitae and identified their two major cities as Thomna and Nagia. Some scholars think the Gebbanitae are the Qatabanians and Thomna is Timna.

If that is the case, where is Nagia?

Wadi Juba contains a village with the modern name of Najja. "Najja" is not a common name for Yemeni villages. Perhaps it is derived from the ancient "Nagia." The modern village, which betrays no trace of ancient occupation, is only a few kilometers from the valley's ancient city site.

"In other parts of the Middle East, it is very common for original site names to be transferred to other places," said Toplyn.

Many Qatabanian inscriptions have been found in the valley. If Pliny's "Thomna" is indeed the Qatabanian capital of Timna, the case for "Nagia" being located in the Wadi Juba becomes more plausible.

"It's easy to convince yourself if you'd like to be convinced," said Blakely, who admits he would like to be convinced.⁴

Since ancient Sabeian inscriptions have also been found in the wadi, a debate rages as to who controlled Juba and when. Some of the AFSM archaeologists lean toward the idea that Qataban controlled the valley first and then lost it to Saba.

Ancient pottery gives some tantalizing hints.

Glanzman is laboring to construct a chronology for



A timeless South Arabian scene. Every morning, this old man would lead his camel from his village, past where the American archaeologists were working, to the town of Juba al Jadida. There, he probably hired out the animal to one of the town's sesame seed presses. In Yemen, camels are still used to drive these machines.

pottery found at Juba's ancient city. He will spend the next two years, when not working in the field, at laboratories at the University of Pennsylvania, where he and Blakely are graduate students. There, he will examine the thousands of shards found in the valley.

Although it is still early for sweeping conclusions, Glanzman has detected strong Qatabanian influences on the Juba pottery. These influences predate the construction of major defensive works around the city.

Inscriptional evidence suggests the walls may have been built between the 5th and 6th centuries B.C. After that period, Sabean influence on the pottery becomes stronger.

"I say there is some strength to the idea that the defensive works were built immediately before or as a result of Sabean takeover of the site," said Glanzman.

It will take several more years of archaeological work in Wadi Juba to settle these matters. Undoubtedly, some blank spaces will remain in the history books.

It is a truism of archaeology, as more than one expedition member noted, that you often end up asking more questions than you answer.

* * *

Even if it was an important center on the spice route, ancient Juba belongs in the second rank of great South Arabian cities — behind Marib and Timna.

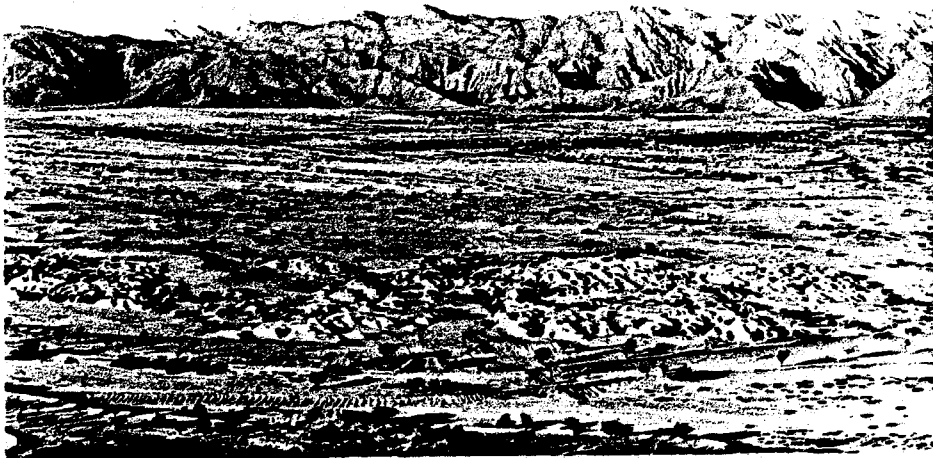
And nothing at either Juba or Timna could compare with



The north and south sluice gates are the most impressive structures remaining from the ancient irrigation system at Marib. Above, the south sluice gate. The dam itself was an earth embankment faced with stone. Little remains of it today except for irregular ridges of stratified silt. Below, the dam as seen from the north sluice gate. Basically, the dam held back the waters of the Wadi Adhana while the sluices diverted the water into fields on either side of the wadi. The system was not designed to store water. It did not include a reservoir.

the famous dam at Marib.

The Sabbeans constructed the Marib dam around 750 B.C.



Except for one small sluice gate left intact, the main evidence for extensive ancient irrigation systems in Wadi Juba consists of these silt deposits. Ancient Juban farmers trapped rainwater rushing down from the mountains. The silt deposited by that water can be seen in the photo. The gully in the foreground probably was once an ancient canal.

Until it fell into disrepair around 575 A.D., the 600-meters long dam irrigated some 4,000 acres.

Juba's irrigation system was nowhere near as grand.

Expedition volunteer Marny Golding compared the two sites in this way. "We're down there (in Juba) trying to find out what the poor people were doing when the Queen of Sheba was visiting Solomon," she said.

Despite the differences in scale, the principle behind all ancient South Arabian irrigation systems — whether at Marib, Timna, or Juba — was the same.

Twice a year, the Indian Ocean monsoons bring rain to the area. When the rains are heavy, a flash flood known to the Arabs as the seil (plural, suyul) rushes down from the mountains into the wadis.

Ancient farmers built dams at the base of the mountains to catch the suyul, and canals to divert the water to their fields. The system attained its greatest complexity at Marib, where two massive stone sluices channeled the water.⁵

All of the South Arabian irrigation systems, and the civilizations constructed around them, fell into ruin during the first 500 years of the Christian era. Scholars generally cite worsening political and economic conditions as the cause of this.⁶

A serious blow fell during the 1st century A.D.

At that time, Roman sailors learned to bypass Arabia and use the monsoon winds to take their ships directly from Alexandria to India. Christianity's rise to become Rome's state religion in the 4th century virtually destroyed the market for frankincense and myrrh.



The major advantage modern Juban farmers have over their ancient ancestors is that they can draw irrigation water out of their wells by using Japanese diesel pumps. The ancients were stuck with camel-driven waterwheels. The moderns can also dig deeper wells with their sophisticated drilling equipment. What's true of the Wadi Juba is true of Yemeni agriculture in general -- wherever you see a lush patch of greenery, there's a diesel pump chugging away close by.

All that remains of the ancient irrigation system in the Wadi Juba is one small sluice gate, canal tracks, and great mounds of stratified silt deposited by the suyul of long ago.

By studying this evidence, the AFSM archaeologists hope to be able to determine how the system operated in the wadi. Toplyn began preliminary work on the study this year.

"What impresses me is the ingenuity of these people and how they were able to exploit this environmental area to the maximum," said Toplyn. "The ancient system irrigated incredibly massive tracts with minimal effort."

The Qatabanians built an elaborate system at Wadi Beihan, near Timna. When the AFSM carried out archaeological work there in 1950, the researchers concluded that the ancient people of the area cultivated their fields more efficiently than do the modern Yemenis.

Toplyn sees the same phenomenon in Juba. "It seems that much larger tracts of the wadi were under cultivation in ancient times than are now," he said. "The population was probably greater then than now."

Juba farmers today use the seil to irrigate their sorghum and wheat crops. They dig irrigation ditches to divert the water rushing down the wadi and construct high-banked terraces to contain it in their fields.

But while the ancient system seems to have depended



Hassan here is a shepherd living in a brushwood hut with his wife Sayida outside the village of al Wasat. I was passing by and he invited me in for tea and a chat. He was most eager for me to take a picture of his goats. Those beasts are able to digest cotton balls -- no wonder he's proud of them. Hassan said he had one son working in Saudi Arabia and a younger one living in Juba al Jadida. He also told me that he and his wife had two houses in the wadi and the hut was just temporary quarters for their goat herding activities. Maybe. Hassan is one of those Yemenis who is convinced there is oil in Yemen. He thought I was working for the Hunt Oil Company, which is prospecting in the Jawf region farther north. I had a hard time explaining archaeology to him. He insisted on giving me a can of fruit juice when I left, so I brought the couple some oranges the next day.

on a high level of cooperative work, the modern one is more a case of every farmer for himself.

"The ancient system implies much more coordination of effort than exists today," said Toplyn.

On the other hand, modern farmers in the wadi have a tremendous advantage over the ancients when it comes to perennial, or all-year-round, irrigation.

Rain comes to South Arabia only between April and May, and again between October and December. Some years, it doesn't come at all. When there is no rain, the farmers must irrigate their lands from wells.

In ancient times, they used camel-driven waterwheels to pull water out of their wells. To this day, Yemeni villagers in the wadi use camels to power the revolving grindstones in their sesame seed presses.

But for the wells, the modern farmers prefer the vastly more efficient Japanese diesel pump. With this device chugging away, the farmers can create startling strips of lush greenery in the Juba dustbowl. They use the well pumps to grow vegetables, elb

trees, and qat.

Elb trees, which have been common to South Arabia since ancient times, produce a small, apple-like fruit. Elb groves take up most of the cultivated land in the wadi.

Qat is a mildly narcotic plant grown in Yemen and parts of East Africa. Yemenis like to chew qat leaves for their amphetamine-like effects. Qat is so popular in North Yemen that it has become the major cash crop within the country. It has no export value because the leaves quickly lose potency once they are harvested.

Since qat requires regular watering, Juba farmers would not be able to grow it at all without the diesel pumps.

But there are limitations to the well pump technology. The deeper the well is, the more expensive it is to get the water out. In the Juba Valley, subterranean water levels can go down to depths of 300 meters or more. Drilling the hole and installing the pump might cost a farmer more than \$60,000.

It is not surprising that only a small portion of the wadi is regularly cultivated.

The rest of the land area consists of flat, dusty tracts and rolling hills dotted with clumps of scrub bush and occasional acacia and tamarisk trees.

Women and girls, wearing the brightly colored dresses favored in the region, spend the days driving their herds of sheep and goats through these areas searching out the sparse vegetation.

* * *

For an American visitor, parts of Yemen can be reminiscent of the Wild West -- when a real man wouldn't go anywhere without his six-shooter.

Outside of North Yemen's three major cities -- the triangle of civilization formed by Sana'a, Taiz, and Hodeidah -- government control is minimal. The qaba'il (tribes) are still strong, particularly north of Sana'a and in the eastern mashriq.

For the average qabili (tribesman) in these areas, the ostentatious display of weaponry is his preferred symbol of manhood and independence.

As do other qabilis, the men in Juba wear the curved janbiya dagger in the middle of the waist. Often topped with an expensive rhinoceros horn handle, the janbiya is the single most distinctive item of male Yemeni dress. Even educated urbanites will occasionally wear one.

But only a true qabili will also carry a single-shot rifle or submachine gun. Some wealthy ones wear pistols in hip holsters with gaudy ammunition belts as well.

The rifle, or bundug, has been in Yemen for centuries. The submachine gun, often a Soviet AK-47, first became popular during the 1962-70 civil war.

In 1962, the Russian-supplied Egyptian army came to Yemen to support the newly-proclaimed republic against the deposed imam, the country's traditional ruler. The Saudis poured American and European weaponry into the country to aid the Royalist forces. It was common for tribes to receive guns and money from both sides.

When the war ended, the qabilis did not have to hand

these arms over to the government. In fact, the flow of weapons into the country continued. To this day, qabilis living along the North Yemen/Saudi Arabian border make good money smuggling weapons into their country.

The government is able to keep guns off the streets of its major cities. But in an isolated region such as Juba, most of the men wouldn't leave the house without their submachine guns.

Some older boys even attend school in the mornings carrying guns. One wonders if they have to check them at the door.

The People's Democratic Republic of Yemen (PDRY -- South Yemen) is less than 25 miles away from Juba. This quasi-Socialist state does not get along with its market economy-oriented northern neighbor. Despite frequent talk about reunification, the two Yemens twice fought minor border wars during the 1970s.

South Yemeni agents come into the Wadi Juba from time to time. Young men from the south distribute Marxist literature to the Juba farmers and advertise the benefits of Socialism.

These young men can be quite brash. Al Bahri bin Hishlah Abdullah Bahri, the district commander in Juba, once intercepted a young man driving into the wadi with a truckload of Marxist books.

Al Bahri confiscated the literature. As he was walking back to his own vehicle, the young man called out to him. "Al Bahri?" "Yes?"

"Read them."

The North Yemeni government cannot do much about this infiltration from the south. The frontier in this area is ill-defined because the two countries have not agreed on international boundaries.⁷ Families straddle both sides of the border and their members visit each other. Obscure, unguarded tracks through the mountains allow them to do this.

Smuggling is big business in the Wadi Juba. Given the poverty of the agriculture, how else can one explain all the shiny new Toyota Land Cruiser and Hilux pickups churning up the wadi's dirt roads? Or the many diesel-powered electricity generators lighting up village houses at night? Some people even have color television sets.

The Saudi Arabian border lies about 200 miles to the north across the desert. Like the camel-mounted Bedouin of old, the modern, motorized Yemenis know how to navigate the sandy wastes. When they get to Saudi Arabia, they can buy goods cheaper than they could in Yemen. The Yemenis impose stiff import taxes on products shipped into their country. The Saudis, on the other hand, actually subsidize some imports, particularly food items.

Every evening, the four-wheel-drive Toyota pickups roar out of the Juba villages heading north with their blanket- or plastic-lined cargo holds empty. Throughout the following morning, they come filtering back in through the mountain passes laden with Japanese electronics; barrels of Saudi gasoline; American wheat or barley; and crates of fresh fruit from Europe.

It seems that the drivers sleep during the afternoons and turn their vehicles over to their sons. Young boys spend a good part of the sun-drenched afternoons driving around the villages.

One of the American archaeologists remembers an occasion when he stopped at a Juba gas station. He looked over at an adjacent truck where the head of a small boy peered over the steering



Al Bahri bin Hishlah Abdullah Bahri, governor of the Juba district, accompanied the American archaeologists up a mountain one afternoon to show them some ancient inscriptions. He brought along with him a considerable entourage, including armed guards and boys carrying bundles of gat and thermos bottles of tea. Above, al Bahri (the large man in the center) and his retainers take a rest from their mountain climbing exertions to chew gat and drink some tea. Aside from being the official in charge of Juba district, al Bahri also is an officer in the North Yemeni army. His father was a prominent sheikh, or tribal leader.⁸

wheel.

The door opened to reveal the boy standing on the seat. Another small boy sat on the floor ready to manipulate the accelerator, clutch, and brakes.

* * *

Given this "frontier spirit" in Juba, the Americans consider themselves lucky to be working there at all. Maintaining good relations with the locals is a priority for them.

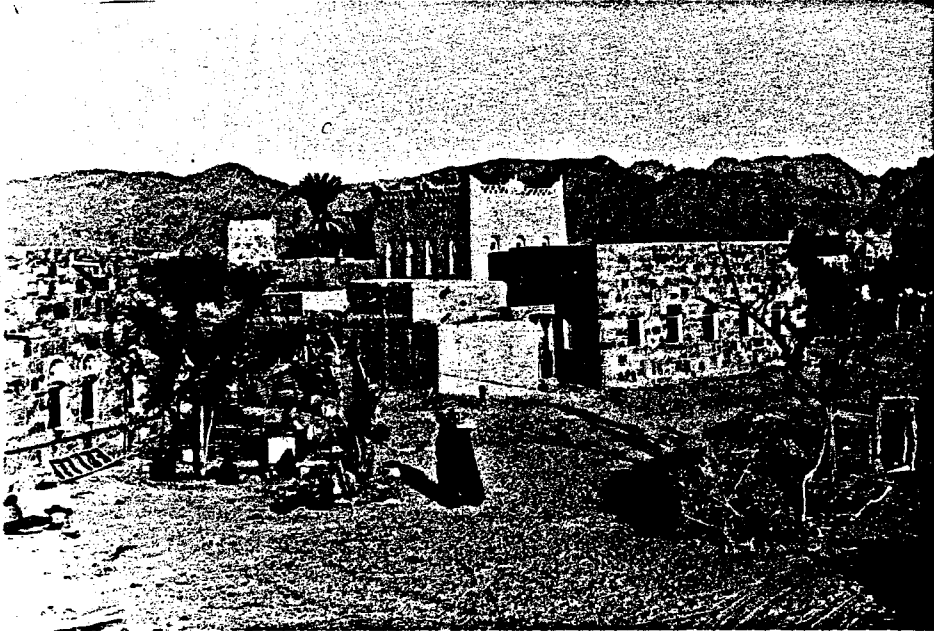
"We're subject to the whims of the surrounding population," said Toplyn. "These people could shut us down."

The AFSM archaeologists stay in the valley two months out of every year. They have rented a house in the village of al Wasat. The house is no different from others in the village, being constructed of mud mixed with straw. Electricity is supplied by a private generator. Water supplies come from local wells.

A village woman bakes bread for the Americans every morning. They do the rest of their cooking on portable gas burners.

Their greatest luxury is a shower, which is simply a water tank with attached shower nozzle perched on a wall.

They are the only westerners living in the valley. Marib,



The village of al Wasat as seen from the roof of the AFSM house. The wealthier villagers construct their houses of cut stone (also used in the government-run primary school and small clinic). But most build with mud. Note the women carrying pans of water on their heads. Women in this part of Yemen rarely go about veiled.

the capital of the governorate, is a two-hour drive away over some very bad dirt roads.

When the first AFSM exploratory team came to the valley in 1982, they encountered mistrust and hostility. Farmers shooed them off their lands at gunpoint. Shopkeepers were rude. Children ran up to touch the oddly-dressed strangers with the pale skin.

This year, the Americans were protected by two powerful allies.

One is the mughtar, or "mayor," of al Wasat. This tall and skinny old greybeard named Ali Nagi watches over the Americans when they are in his village.

One afternoon, the Americans received some European visitors. The mughtar came over to the house to check them out.

Some young boys chose this time to get rambunctious and chuck some rocks at the Americans' canvas-covered outhouse — which was in use at the time.

Hearing the uproar, the mughtar came outside to investigate. The boys scattered. The indignant old man took off one of his sandals, brandished it over his head, and without another word went off in pursuit of the naughty awlad (boys, singular walid).

It is unlikely that the mughtar actually caught the boys since his "hot pursuit" amounted to a slow, deliberate walk. But for the Americans, it was a heart-warming spectacle nonetheless. These rock-throwing incidents, and the constant

clamor for sura (a photograph), constituted the greatest annoyance they faced in al Wasat. Jokes about "the curse of the walids" became a staple around the AFSM compound.

Without the mughtar around, the situation would have been worse. He is the most influential man in the village. His father was mughtar before him.

Many years ago, the father moved his house from another village to the present site. Most of his neighbors followed him. Since the new village was located roughly in the center of the wadi, it was called al Wasat, or "the middle."

Al Bahri's protection is even more important for the archaeologists than that provided by the mughtar. Because he is the top government official in the wadi, al Bahri can make sure that the Americans proceed with their work unhindered. He quickly squelches any troubles that arise.

One morning, the archaeologists arrived at their dig site to find some metal stakes missing. They use the stakes to mark off the area.

When al Bahri came by on his morning rounds, the Americans told him what had happened. Al Bahri said he would look into it.

Within half an hour, a young Yemeni man came driving up in a Toyota truck. Handing the stakes over, he said his father had taken them by mistake. The old man had returned from a business trip to Sana'a to find this big hole in his land. Not knowing what was going on, he had taken the stakes in the expectation that the mysterious diggers would start looking for them and thus reveal themselves.

At least, that's what the son said.

On another occasion, the Americans discovered someone had been removing stones from an ancient irrigation installation. They informed al Bahri. A couple of days later, al Bahri said he had put someone in jail for this transgression.

The same old man who believed Wendell Phillips had "stolen the moon" also complained to al Bahri about the Americans digging on his land. Al Bahri explained that the Yemeni government had given the archaeologists permission to work there. The old man continued to sputter protest.

"I'd put you in jail if you weren't so old," al Bahri finally told him.

Such is al Bahri's affection for his American charges that twice he has led them up mountains to point out ancient inscriptions. Armed bodyguards and boys carrying bundles of gat and thermos bottles of tea followed al Bahri on these excursions.

Al Bahri is only 35 years old. But a too sedentary life of office work and interminable gat sessions has taken an obvious toll on his waistline. Perhaps nothing indicates his friendliness to the Americans more than the effort he put into huffing and puffing up those mountain sides.

A well-educated man, al Bahri attended the North Yemeni military academy in Sana'a and is an officer in the YAR army. But he does not speak any English. Except for a few Sudanese men working as doctors, teachers, and brickmakers, nobody else in Wadi Juba does either.

The Americans are very fortunate to have on their team Abdu Ghaleb, a North Yemeni citizen working on his doctorate

in archaeology at the University of Pennsylvania.

Ghaleb is assistant director of the AFSM Juba project. Aside from his archaeological duties, he interprets for the Americans. He deserves most of the credit for the good relations the AFSM has with al Bahri, the people of al Wasat, and the North Yemeni government.

"Without Abdu, the situation would be very difficult," said Blakely. "Our good relations with the Department of Antiquities are directly attributable to Abdu. I don't think any other archaeological group in the country gets along with them as well as we do."

A relaxed and friendly young man, Ghaleb is one of only two Yemenis ever to study archaeology at the doctorate level. He said he became interested in the subject while attending school in Yemen. He noticed that very little was known about his country's early history. He wanted to fill in some of those empty spaces.

"To know your history is to know yourself," he explained.

Some of that spirit is beginning to catch on with the people of Wadi Juba.

Ghaleb wrote a report in Arabic about the expedition's activities in the wadi. Al Bahri ordered the local schools to broadcast it over their public address systems.

Afterward, more farmers approached the Americans with information about ancient inscriptions than ever had before. The archaeologists found this gratifying — at last the locals were beginning to understand what they were doing in the wadi. Before, everyone seemed to suspect the Americans were looking for thahab (gold).

Wadi residents also presented the Americans with pottery shards and pieces of carved alabaster.

The archaeologists try to discourage this practice. In archaeology, historical context is everything. Antiquities removed from their original locations cannot be dated easily.

The vast majority of ancient artifacts in the valley have been moved several times. Stroll through the lanes of al Wasat and you will find incorporated into the walls of several houses stone blocks decorated with ancient lettering.

A series of walls once guarded Juba's ancient city. During the past 75 years, valley residents quarried out most of the large stones.

The Civil War didn't help much either.¹⁰

Juba's ancient city is located under a large mound, or tell, adjacent to the modern town of Juba al Jadida ("the New Juba"). The townspeople long favored the tell as a garbage dump.

During the war, Egyptian soldiers fighting with the government forces dug machine gun emplacements on top of the mound. Archaeological context matters little during wartime.

* * *

Despite all the problems, the AFSM archaeologists are making progress in their efforts to piece together the history of Wadi Juba's ancient civilization.

Toward the end of this last season, Glanzman and

Ghaleb discovered the remains of an ancient foundry. As this material is sifted through and analyzed, it should tell much about the technological level of the ancient people.

The archaeologists had wanted to dig down past the level of the foundry and reach a stratum where evidence of human habitation ends.

But they had to halt their work two days earlier than planned. They found that the deeper they dug their probe, the greater became the danger of the walls caving in on them.

"The excitement was almost too great for us to say, 'we can't dig anymore,'" said Glanzman. "But safety comes first."

Al Bahri has provided a guard to watch over the site. And as do the people of the Wadi Juba when they want to demonstrate ownership of a plot of land, the Americans placed shak, or camel thorn, around the dig area.

It should all be waiting for them when, come December 1984, the AFSM team returns -- to continue to mine the ancient secrets of the Wadi Juba.

NOTES

¹For the most recent account of the spice route, see Nigel Groom's Frankincense and Myrrh: A Study of the Arabian Incense Trade (London: Longman Group, Ltd., 1981). Groom concluded that many commonly-held beliefs about the trade had to be revised. Of the Queen of Sheba, he wrote: "... the available facts do seem to suggest that she was not a queen from South Arabia, as is popularly supposed, but the head of a tribe of Sabaeans of north Arabia who engaged in commerce with Tyre through Israelite territory." He added that there is "no reason to think that any direct trading existed between Solomon's Israel and the far-distant Sheba, or Saba, of the south at so early a date." (p. 54)

²The earliest reference to the frankincense and myrrh trade comes from about 1,500 B.C. Egyptian records refer to an expedition Queen Hatshepsut sent down the Red Sea to "the land of Punt" to acquire myrrh. Groom argues that the expedition did not sail past the Bab al Mandab straits, as many historians once believed. "Punt" is probably the Eritrean coast, rather than the ports of South Arabia, he says.

Herodotus was the first classical author to write about frankincense and myrrh coming from South Arabia. The overland camel caravan route from South Arabia to Palestine was definitely in operation by the 5th century B.C. and probably began earlier than that.

Of the two major incense products, frankincense was probably carried in greater quantities than myrrh. Unlike frankincense, myrrh tended to deteriorate during travel and it cost more.

³"Large walled towns were uncommon occurrences in pre-Islamic South Arabia," wrote AFSM archaeologist Michael R. Toplyn (The Wadi Al-Jubah Archaeological Report, Volume 1. Washington, D.C.: AFSM, 1984). "Sites boasting major fortifications (hajars) such as Hajar Kohlan (Timna') and Ma'in were regional centers of some importance. The massive walls and impressive size of (Juba's ancient city) certainly imply the past existence of a centralized authority and/or some degree of political control in Wadi Al Jubah." (p.64)

Groom analyzed the terrain between Timna and Marib and made a strong case for Juba being on the spice route.

"Passage for baggage camels across the desert north of Wadi Harib is ... difficult and the incense caravans are unlikely to have attempted it; instead they would take a route which crossed the mountains on the western flank of Harib and led them to the next natural staging post on the way to Marib, in the area known as Wadi Gubah." (p. 182) Following Groom's suggested route, the caravans would have taken three days to cover the 65 miles from Timna to Juba, and then one more day to cover the 20 miles to Marib.

Juba's importance as a stop on the route from South to North Yemen continued into modern times. The German explorer Hans Helfritz (Land Without Shade. New York: Robert M. McBride & Company, 1936) accompanied a camel caravan along this route in 1931. "The shortest and most frequently used road to Sana'a

takes one through Juba, which is about a two days' journey from Harib. But the King (the Imam Yahya, ruled from 1904-48) had just dispatched large formations of troops to Juba, there to take the field against some insubordinate tribe. No foreigner might be allowed to gaze upon such military undertakings, and so a short, convenient journey was denied me." (p. 196)

⁴Groom seems to be convinced. Referring to Juba's ancient city, he says: "It is supposed that these ruins, partly covered by a modern village (Juba al Jadida), may mark the site of the city of the Gebbanitae named 'Nagia' which was recorded by Pliny." (p. 184)

⁵For the most complete description of the Marib dam and South Arabian irrigation systems in general, see Richard Le Baron Bowen Jr.'s article "Irrigation in Ancient Qataban (Belhan)" in the book he edited with Frank P. Albright (Archaeological Discoveries In South Arabia. Baltimore: The Johns Hopkins Press, 1958). Bowen and Albright were part of the AFSM's expedition to Timna in 1950.

⁶Scholars don't have much trouble agreeing on the reasons why the spice trade declined. But there is an unsolved problem: how dependent on the spice trade were the South Arabian cities? Groom points out that most of the people in South Arabia were farmers and had nothing to do with the spice trade. Frankincense and myrrh fetched astronomical profits in Rome. But the network of middlemen needed to transport these items stretched from South Arabia to Palestine. One can assume that the South Arabian cities received only a fraction of the final profit.

Historian Gus W. Van Beck ("The Rise and Fall of Arabia Felix" in Scientific American, December, 1969) noted evidence from classical writers that South Arabia was agriculturally self-sufficient. "This nutritional self-sufficiency was made possible only by the inhabitants' ingenious use of flash-flood water in their irrigation systems," he wrote. (p. 43)

Yes, the spice trade was important. But maybe we need to look more closely at the agricultural situation of South Arabia. Could the "fall" of South Arabia be attributed, in part, to adverse climatic changes?

British historian Brian Doe (Southern Arabia. London: Thames and Hudson, 1971) said no. "There is ... no evidence that present living conditions and aridity are so very different from that of about three thousand years ago." (p. 18)

Groom, once again, disagrees. Summarizing the latest research on the subject, he says "there have been much greater climatic and environmental changes in Arabia than had been supposed." (p. 217) He believes aridity increased in South Arabia from the 2nd millenium B.C. to about 850 B.C. and that vegetation in the area was considerably reduced over the last 2,000 years.

As is the case with ancient Rome, there are many reasons why the South Arabian empires declined. Gibbon didn't have the last word on the decline and fall of the Roman empire. The scholarly arguments about ancient South Arabia should continue as well.

⁷The YAR/PDRY border basically follows the line

established by the Anglo-Turkish Boundary Commission of 1902-05 and reaffirmed by the 1934 Treaty of Sana'a. The line was designed to separate British-controlled territory in the south from that held by the Turkish occupation forces in the north.

The YAR, established in 1962, and the PDRY, founded in 1967, have never been able to agree on an international boundary. But they observe the original Anglo-Turkish line as a de facto border.

⁸ A bit of mystery surrounds al Bahri's father.

In his Qataban and Sheba book (New York: Harcourt, Brace and Company, 1955), Wendell Phillips includes a photo of one Sheikh Abdullah Bahri and identifies him elsewhere in the book as being of the Bal Harith tribe of the Wadi Beihan.

One evening, al Bahri junior visited the AFSM compound in al Wasat. He was shown a copy of the book. He positively identified the man in the photograph as his father. He said his father had been entrusted by the Yemeni imam with the job of watching over Phillips while the Americans were excavating at Marib.

But the British controlled Wadi Beihan in the 1950s, not the Yemeni imam.

Could Phillips have made a mistake? Or did the al Bahri family move north from Wadi Beihan to Wadi Juba sometime after 1950 or 1951, when the photo was taken?

I did not notice this discrepancy until after I had returned to Sana'a, so I did not have a chance to ask al Bahri about it.

According to the mughtar's son, the name of the tribe in Wadi Juba is Beni Saef (Sons of the Sword). He said the locals were Shaefi, or Sunni, Muslims. Shaefi tribes tend to concentrate in South Yemen and the southern part of North Yemen, while Zaydi, or Shi'ite, tribes dominate the northern part of the YAR.

I am intrigued by the fact that, throughout the 1950s, Yemeni tribesmen from Wadi Harib made hostile incursions into Wadi Beihan. Worried that Shaefi tribes in Wadi Beihan might join with Shaefis in North Yemen to overthrow his Zaydi regime, the Imam Ahmed sent his soldiers down south to stir up trouble.

For what it's worth, British historian Eric Macro writes in his book Yemen And The Western World (London: C. Hurst & Co., 1968) that "In mid-March (of 1956) one of the eleven Balhareth sheikhs was bought over by the Yemenis (Imam Ahmed) for 50,000 riyals, and some 600 Saudi rifles were sent to Marib in Saudi trucks for distribution among the Protectorate (a British-controlled tribal federation) tribes (i.e., in Wadi Beihan)." (p. 101)

I could be making a mountain out of a molehill here. But it's a good thing to keep in mind when talking about Wadi Juba that political funny business on the North Yemen/South Yemen border has been going on for a long time.

⁹ There is some evidence that Wadi Juba was largely uninhabited from the first centuries of the Christian era to the early 19th century. The AFSM archaeologists have found only a few Islamic pottery shards in the valley. Wadi residents said the town of Juba al Jadida, the largest settlement, has been inhabited only for about five generations (about 150 years). They said their ancestors came from the village of al Jarashah, located in a pass about four kilometers north of Juba al Jadida. This suggests that the wadi itself was mostly used for grazing animals after the ancient

irrigation system fell into disrepair.

¹⁰I believe the Royalists controlled Wadi Juba through most of the civil war, except for a two-year period between March 1963 and the summer of 1965, and again for a few months in the summer of 1967.

I base that belief on the fact that a close strategic relationship existed during the war between Marib and Harib. Whenever one of those places changed hands, the other soon followed. Wadi Juba is midway between those two towns, performing the role of supply corridor, just as it did in spice caravan days. It would have been impossible for the Republicans and Egyptians to have held Juba without Marib. Nor could the Royalists have held Juba without Harib. To figure out what happened in Juba, you just have to look at the military situation of Marib and Harib.

Throughout the war, Wadi Harib was an important Royalist supply route. The Saudis funneled supplies to the imamic forces through this pass. The British authorities in Wadi Beihan seem to have looked the other way.

David Smiley (Arabian Assignment. London: Leo Cooper, 1975) was a British mercenary working for the imam. He wrote that "Sherif Hussein, the Ruler of Beihan State in the Aden Protectorate, was a good friend of the Royalists, sending in convoys of arms to them in the early days of the war and providing accomodation and transport later for the mercenaries infiltrating through Aden." (p. 196).

The British had bad relations with the Republican government in Sana'a for the same reason they didn't get along with the imams -- the border dispute.