

DESERT TRICKS OF THE TRADE OCT 1-1995

AFGHANISTAN DESERT OVEN:

This model is over thousands years old and still works today. Its made from a conical mound of clay, looking exactly like a beehive with the top cut off, and rises above a shallow pit in which charcoal is kept burning.

The opening of the beehive gives access to the inner sides, which slopes over the coals, and it is against these sloping sides that the raw dough is fixed.

Don't ask me why the dough does not fall into the coals for I don't know, maybe its because its sticky. By trials and errors the desert people have developed this stove 3 or 4,000 years ago.

The dough is just sticky enough to cling to the sides and the fire is cool enough not to bake the bread too quickly. Its obviously impossible yet it works.

Note of the co-author. I have no plans for this oven, should anyone have one I would appreciate it very much to have one. Maybe some Afghanistan reading this could help me. Be my guest.

SAHARA TRAVELLING TIPS:

1: Turban to cover your head and face. You'll need them badly. Wind is what kills you in the desert as in the polar region. It dehydrates you in no time. So cover your face or die. Having covered your face with the turban pour water off your canteen directly onto your turban until it is dripping down your neck.

The turbans are usually made of 8 yards of cloth and will hold a

lot of water and will release it slowly, lowering the temperature of your head as it evaporates. This is the way to lick the heat.

If you are travelling lets say in a jeep you will notice that the heat combined with the wind will dry your turban within 10 to 12 minutes, yup that fast. Then you have to start the process over and over till you reach your destination.

Once you have reached it and assuming that there is plenty of water there, just dive in with all your clothes so that the body can absorb the liquid it has lost.

This is why one should not travel during day time and if so make doubly even triply sure that you have plenty of water. Not only for the drinking but for the soaking, otherwise the wind and heat will kill you.

2: Having a big white flag at the end of your jeep antenna so that the next driver can see you. In the desert one gets easily separated, since neither driver can be sure that what looked like a potential road would turn out to be so, and often it was the driver in second position who found the successful trail, whereas what looked good to the first man had turned into a wall of impenetrable sand.

When this happened the unsuccessful driver would whirl about, look for his companion's flag and set off in hot pursuit, neither waited for the other but each felt responsible for seeing that the separation did not become to great.

If both end up in a real dead end then the chase starts a new for a better road. In that travelling business you need that other flag. Trying to travel alone either by car or on foot is crazy. The buddy system is best.

3: Gotch??? = At night travelling in a jeep one can not see the gotch as well as in day time. Gotch is a white flaky substance that comes in big patches. Its called also gypsum. The desert is full of it and it always comes in patches. Mixed with water you can make plaster out of it.

However don't hit it when its dry for you will get trapped in the gotch and will need the other jeeps to get you out of it for its is very fine and soft and flaky and it provides no traction for a spinning wheel. "Gotcha!?! " All you need to get the other jeep out is a good towing rope or cable and it pulls out nice & easy.

If you were to hit that stuff at more than 25 miles per hour you might end up with a broken nose even worst a broken axle. So if you do hit, protect your face the stop is sudden like hitting a brick wall. "Gotcha!"

4: Up or down a hill sleeping? For every man who died in the desert from sun and heat, a hundred die from floods. Once in every 3 or 4 years it rains in some part of the desert.

As a result water gushes down the desert and is not absorbed by the sand right away, it sort of glides on it. It will build a wall of water up to 30 feet high & destroys everything before it.

It moves whole dunes from one place to another and in anything caught in a low spot is crushed. Don't sleep in gullies or you might well never wake up.

5: Bad infection: Be careful when you travel in the desert specially during the day which you should not do unless in dire emergency. Be careful not to bump your nose.

The mucus dries up into little needles which puncture the skin which results in bad infection. The thirsty air will suck away all moisture and your nose will be lined with needles.

In order to help your nose pour some water into your palm and breath it through the nose, it will help a bit. Basically don't travel during the day its not worth it unless you have a top emergency and plenty of water and don't forget the turban.

IRRIGATION EXPERTS THE AFGHANISTAN:

Out in the Desert of Death, they once had millions of people living from this knowledge. From look like a procession of tall mounds that led from now nearly vanished cities as Qala Bist where the Helmand river disappears, one can still see how they tapped water for their irrigation purposes.

These mounds will lead you toward a group of small mountains some 20 miles to the East. These mounds are man made for they appear at regular 1/4 mile intervals and each one of them is of considerable size. One can easily count some 80 of them.

These mounds were built of mud bricks rising to a height of 15 feet or more and a crude ladder led to the top. Inside was another ladder much longer than the first leads down to the darkness. If you were to drop a pebble you would hear a splash in the water, this shaft would lead you to an underground stream.

Once you go down the ladder you end up on a narrow edge of earth bordering a clear stream of water only faintly illuminated by sunlight seeping down the shaft. This crude yet effective irrigation system is what was bringing water down from the hills and gave life to the desert at one time. No one remembers who

built them and under whose orders.

The tunnel itself is about 4 foot high, one had to duck-walk to go through it and from one mound to another it is about 1/4 mile long. The ceiling was not protected in any way and is held in place merely by the cohesion of clay. It oftended collapsed.

So today if one was to copy this system one would have to make sure to correct this problem unless he or she wants to be buried alive. Today's technology can easily correct this dangerous effect just like we do in modern tunnels either for man or water.

This "karez" system was very costly in human life for the ceilings would often collapse since they did not shore up their ceiling. It was a cruel land and under cruel laws.

This irrigation system was found to be the best way to transport water across the desert, if they had tried it on the surface the sun would have evaporated it all in no time.

Sure one can say heck why bother, lets use plastic pipes. True indeed but in those days there was no plastic. So should an event occur that forces us to use old ways then this way of irrigation would work now as it did then.

DAM BUILDING: "The old fashion way" "Exercise of a kind"

To build a dam, a great dam requires 2 things, a gorge and a mountain near by. Down there you see the gorge with steep, solid walls and over there you see one hell of a mountain. Now what's the relationship?

Well first you build a road from the mountain to the gorge. Then you lead that road over a temporary bridge that crosses the

gorge, high up in the air above the rapids.

Then you dynamite the mountain rock by rock and haul in trucks to the bridge, where you drop the rocks in the river. And after you do this day and night for 3 or 4 years, you have a dam.

For seven months or more trucks will dumb rocks off the temporary bridge and nothing will happen, because the river will wash your boulders down the stream as if they were straw.

But one day the rocks will begin to hold and the river will start to back up, just a little. But on that day you will have it strangled. Then you can do with it what you will.

To hit 2 birds in 1 stone one starts building a tunnel many feet above the present water level. Those rocks will also be thrown into the stream and when the river starts to back up & gradually rises to that level, it will run through the tunnel which one would use for electricity.

Then you move in thousands of trucks and throw thousands of tons of rock into the ravine, pack them with earth and after some years concrete the exposed face and find yourself with a dam.

One has to calculate how high the level of water will rise so that the tunnel is at the right height and right size. But I leave that to engineers. This is only a brief description as mental exercise for maths or engineers students.