

Finca Bayano

Newsletter December 2014

Water Reservoirs

Many things have been said and written about water. Unfortunately, we have to assume that the worst will come true: water is more precious than oil, and wars will be fought over it.

For that reason, there is no time to lose. We have to make sure today that there will always be enough water at Finca Bayano in the future.

We are building the first water reservoir. It's going to be eight yards long, three feet deep and three feet wide. 1,300 gallons will be stored in it for the next dry season.

Still, there is enough water in Panama, but we want to make ...



... provisions for possible draught, like the one in California.

After one day of work the 'hole' is ready, however, the surface is very rough.

The sides are plastered with a mixture of mud, straw and water to make sure that the plastic foil won't be damaged. The bottom is also smoothed with mud.

Like thousands of years ago, the mass is mixed with the feed and applied with the hands.



It remains to be seen whether this technique will work out.

It's a bit of an experiment and we want to improve for future constructions.

Plastering was not ready yet when we started to spread the foil.

But that should only be done in the morning, when there is no wind. Otherwise the foil becomes a sail.





My employees still have no idea of what I am intending to do. So far there has been no draught in this area and water reservoirs have not been necessary. Hopefully, they won't be needed in the future.

But prevention is better than ...

... having no water, once 'El Niño' or whatever other reason, should bring a change to the phantastic conditions that prevail in Panama.

Although the ground has been smoothed I prefer not to step on the plastic foil in order not to damage it.



One hour later: the foil has been placed in the 'hole'.

The top is overlapping one foot, which is covered with soil, in order not to slip into the reservoir.

Two more smaller pieces of plastic foil are being placed on the ground to avoid lose soil from being flushed into the reservoir, by the rain.



This is done temporarily; it was becoming late on that day and we could not finish the job.

Unfortunately, it was not raining.

Next morning, however, we were really surprised.

The reservoir was filled to its capacity.





We removed ...

... the temporary
plastic foils ...



... and started the
very well proven
Finca Bayano
'grass-fast-planting'
procedure.

Grasspapes are cut off...



... where we are about to improve the road...

... and taken to the place of action.





Left side of the photo:
Within one hour the
'meadow' on the
higher part of the
water reservoir had
been 'planted'.

Right side of the
photo: Now the lower
parts are being
straightened ...



... and grass is being
planted there, too.

Eventually, we are
installing an overflow.

It's still a long way to perfection but the efforts are worth it. The first water reservoir is functioning.

In the Background: At an elevation of 1,600 feet, Finca Bayano is in the clouds again. The temperature is in the mid sixties.



The overflow is working, however, the grass we have planted was flushed away. We have to improve on this. Possibly we will place stones on top of the grasspales until they have taken roots.

In the end, the 'hole' is looking quite good. Now we will have to cover it.

Water reservoirs will be built in places that are far away from the creek.

