Testimonial's

I called BioSystems in when I found two cows had drowned after trying to eat the grass covering my effluent pond. BioSystems Australia helped me view my pond as an asset rather than a liability. Six weeks after incorporating BioForce into my pond I could row a boat across it (if I wanted to!). This waste product is now a very important part of my fertiliser program. Thanks.

P. Benson, Gippsland

Brix levels in my grass doubled and plant nutrient tests indicated 30-40% improvement in nutritional value after using biologically treated waste water, a must for every farm. Thank you again for your professionalism.

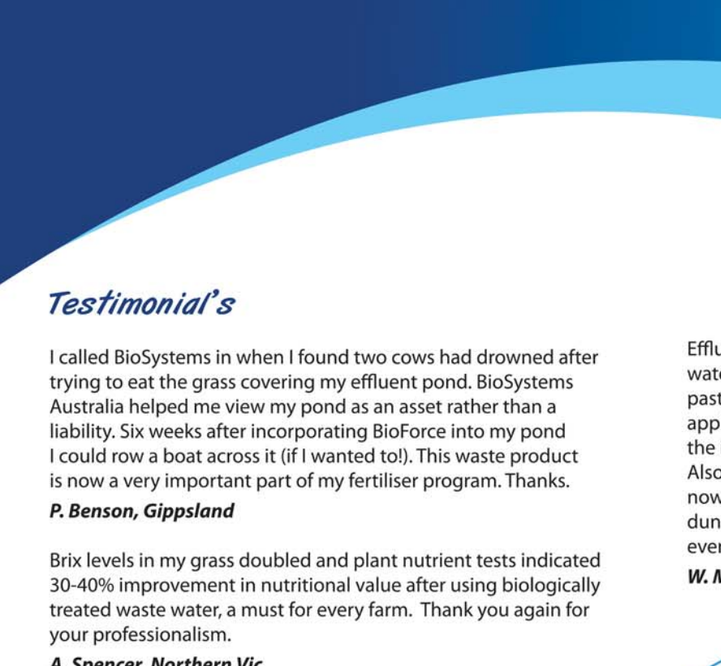
A. Spencer, Northern Vic

Smelly dairy, putrid effluent pond, flies and other insects, out of control. Not any more. Within 7 days all these symptoms had decreased or almost vanished. Thanks for introducing this product to us.

Contented Dairy Farmers Wife, Newry Gippsland

Effluent pond 30m x 30m x 3m deep sludge then dirty stinky water on top. I could only get one third of the contents onto my pasture as my pump was consistently blocking up. 4 weeks after applying BIO FORCE I was able to pump my dam almost dry and the improvements in my pasture quality and density is awesome. Also no new weeds are growing and the old ones the cows are now eating. Noticing a huge improvement in earthworm and dung beetle activity. A great product highly recommended to every dairy farmer.

W. Missen, Gippsland



Ring today and get some expert advice how we at BioSystems can help you!

WITH OUR MONEY BACK GUARANTEE YOU HAVE NOTHING TO LOSE.

BIOSYSTEMS AUSTRALIA

Printed by www.divadesign.net.au

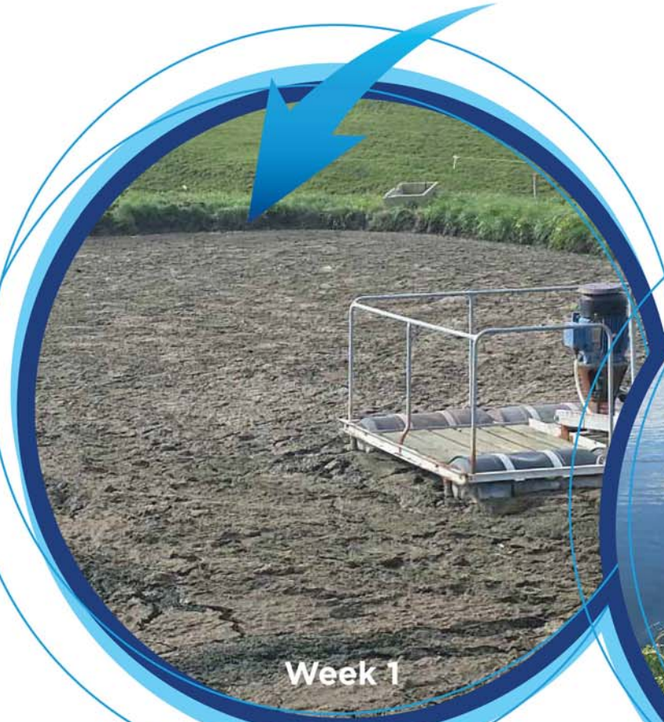
BioForce

GOT ISSUES WITH YOUR EFFLUENT POND?

Sludge Build Up, Odour Control, Waste Management, Flies?

The list goes on...

LOOK WHAT WE CAN DO



Read on to discover more...

BIOSYSTEMS AUSTRALIA

PHONE 1800 809 229 EMAIL sales@biosystemsaustralia.com.au WEB www.biosystemsaustralia.com.au

PHONE 1800 809 229

BioForce

EFFLUENT POND TRANSFORMER

Most farmers treat their effluent like S***

"Dealing with effluent is a pain for most farmers. It's an expensive process for what can be seen as a low-grade fertiliser. It's not surprising that most farmers simply dump it onto pasture without a lot of thought or strategic foresight."

But can that untreated effluent be turned into a high-grade fertiliser? From a scientific point of view, absolutely.

The science behind it

Scientists have discovered that crust and sludge were merely the symptoms of the real problem and that the cause of pond solids were ***microscopic creatures*** below the surface – **anaerobic bacteria**.

These **anaerobic bacteria** thrive in dark environments devoid of oxygen, so to create ideal living conditions they separate the effluent fibres and send them to the surface. Once there these fibres would combine to form the *crust*. They also send fibres to the bottom which combine to form the *sludge*.

Problems these bad bugs cause

- Their solids **block** pump nozzles
- They cause the unpleasant **odour**
- They lower the **nutrient content** (N, P, K)
- They increase soil **leaching** and run off

How do you beat these bacteria

It was discovered that the best way to beat this problem was simple – add *counteractive bugs* into the effluent pond.

This is where **BioForce** comes in! These corrective micro-organisms are called aerobic bacteria and they can change the state of the effluent pond by digesting and breaking down the solids and fibre content of the effluent.

Effluent into nutrient-rich fertiliser

The typical effluent pond is ***rich in nutrients*** - all the major elements and minerals required for plant growth. Unfortunately, nutrients such as nitrogen are in a volatile form that is **easily leached** and **lost into the atmosphere**.

"Aerobic bacteria can change that. They change it by digesting and breaking down the solids and fibre content of the effluent. In the process, these oxygen-loving bacteria retain the N to a more stable, organically-bound N and in the process, also tie up the P and K."

The converted nutrients are ***less leachable*** and more ***available to plants*** over time.

Aerobic bacteria need oxygen and light so when you add them to a dairy pond they immediately begin eating the top crust to let in more light and oxygen.

These bacteria double in number every 20 minutes meaning in a matter of weeks the pond is clear of crust and the effluent liquefied In the process. These oxygen loving bacteria retain the N P & K to a more stable, organically-bound fertiliser. This means the converted nutrients are less leachable and more available to plants over time.

Big fertiliser savings

Think about the amount of NPK you buy in every year to spread on your pasture. It represents a significant cost.

Now imagine your effluent as an ***easily spread*** nutrient-rich source that your ***grass can readily absorb***. That alone could greatly reduce your fertiliser bill.

Big machinery savings

The conventional way of managing effluent is to use *machines:* machines that *separate* the solids; machines that *break up* the solids; machines that *stir* the solids.

Such equipment is very expensive. There's the initial cost of buying the gear. Then there's the ongoing cost of running it. And, of course, there are the costs of maintaining the machinery.

Imagine if you could turn effluent into effective liquid fertiliser *without* using machines. **Tens of thousands saved.**

Dairy Pond Treatment in Victoria

Case Study – North Vic - 014

I arrived at this farm after an inquiry from the son of the owner. He said they were having all sorts of issues with their pond, including the delivery pipe choking up many times. I could not even see where it was emptying into the pond as it was buried by inches of crusty top. The smell was really strong and rotten. The surface was quite solid and did not move much when pushed.

The client had sprayed the grass on the surface of the pond to give me a much better idea of the overall size of the pond. He could not tell me how deep it was but a prod with a 2" pipe showed it had a huge load of sludge and it did not go in very far.

The crust was thick, hard and had a solid grass growth almost all over. It was probably one of the worst cases I have seen and they were considering digging another pond and letting this one dry up and get filled in. He asked if I thought I could fix it and I must say I was unsure of how fast or how far we could go as no one knew what was in there as it had not been cleaned for 3 years. The cost of Mechanical clean out was too much for the client to absorb but he agreed to trial BioForce after hearing it came with our 100% money back guarantee.

To start the treatment we broke into the pond on the outside edge in 8 places and added 50 litres of Bio-force divided into buckets of water. We also started adding it at the shed at the rate of 1 litre per 200 cows per day, washed down in the wash water, to try and get some activity underway.

Within 1 week some changes were obvious and there had been a little rain as well which helped moisten things a bit. The edges were showing a good green colour on new young grass and some small wet areas were becoming visible.

It was like there was an island in the middle separating from the edge.

After 3 weeks

After 4 weeks

After 4 weeks it was beginning to show big holes and the surface of the crust was moving like it was very soft. Big pieces of it were disappearing and more holes were opening up all the time. There were areas of foam showing that there was gas being generated with the biological activity happening in the pond.

As this was a really heavily loaded pond and he was milking 260 cows it was a slow job due to the amount of sludge build-up as well as the new waste. By 8 weeks we had almost a completely liquid pond and there was almost no crust visible. The farm needed irrigation water so some was pumped from the pond and this is what I found when I returned. There had been some serious rain as well since it was pumped down but the pond had no smell, there was a small amount of old dying grass just visible in the middle

He continued to dose at 1 litre per 200 cows and used the pond as irrigation water. His irrigated paddocks were showing a huge change in the health of the grass and the increase in dry matter was noticeable. It was interesting that after 6 months he told me he did not realise just how big the pond was or even how deep it was after the sludge had been digested. In the past he had given up trying to use the pond for irrigation as it was too heavy and just blocked the pump all the time. His answer used to be a very expensive pump out but not anymore. This was a very slow response due to the heavy load in the pond but it has had great results.

After 8 weeks