



Motutapu Dam Algae Treatment

In autumn 2011, the “Duck Pond” on Motutapu Island was fenced off preventing livestock access. The dam was in a highly degraded state with poor water quality. The dam is located within the West Point catchment which contains a small stream that has proven to be the second most productive in terms of freshwater fish diversity and abundance on the island. As a consequence, the margins of the dam will be planted out and the stream has recently been fenced off (December 2012) with the hope of restoring this freshwater ecosystem and improving the water quality that flows in to the Hauraki Gulf Maritime Park.

Following the retirement of grazing, the dam had an outbreak of algae that almost completely covered the dam. As a consequence, it was decided “treat” the pond. Following some research and seeking advice it was decided to trial a product (which was supplied for free from ECO solutions NZ ltd) called *Pond Perfect*.

Pond Perfect is a liquid, all-purpose biological pond additive designed for large ponds. Pond Perfect is super-concentrated, with an ideal mix of bacteria that out-compete algae for nutrients. When used with EcoSocks, Pond Perfect dosing is performed only once a month. EcoSocks are powdered bacteria and nutrients, with a self-contained oxygen source. When placed into water, the EcoSock continuously produces algae-fighting bacteria for a full one month. After one month, the EcoSock is removed, discarded as waste, and replaced with a fresh EcoSock.

Treatments (photos on S: Drive)

- ☐ First treatment – 21/11/2011 – 8 ecosocks, 16 L (8 containers)
- ☐ Second treatment – 21/12/2011 – 4 ecosocks, 8 L (4 containers)
- ☐ Third treatment – 23/1/2012 – 4 ecosocks, 8 L (4 containers)
- ☐ Fourth treatment – 20/2/2012 – 4 ecosocks, 8 L (4 containers)



Dam in September 2011 (first application on 21 November 2011).



Dam on 21st December 2011 (1 month after first application in November)



Dam on 23rd January 2012 (date of 3rd application and 1 month after 2nd application in December) – water quite murky as a result of heavy rain in early to mid January)



Dam on 20th February 2012 (date of 4th application just under 1 month since 3rd application)