Economic and information package



# **Trees Around Aquaculture Ponds**



There are at present a number of misconceptions about the value of trees around fish ponds. In general the placement of trees in close proximity to ponds will cause more problems than they will solve. Following is a list of common questions or statements that have been made and accepted responses.

### Trees around my ponds will shade the water.

If your ponds require cooling this means that you have made a fundamental mistake in choosing the location for your farm and it is outside the favourable climatic region for your chosen species. If you use evergreens (eg. eucalypts) the ponds will also be shaded even more so with the low sun angle in winter.

# If I put trees around my ponds, they will reduce evaporation.

This is a complete fallacy; it is generally accepted that trees lose as much water through their evapo-transpiration respiration as the pond surface does in evaporation and since the trees' roots would be taking up water from the pond, there would be a larger loss of water.

## Trees around my ponds will help to hold the banks together.

The trees actually contribute to the destruction of pond banks by sending their roots into the pond after the water thereby creating seepage lines. Another problem with this is when the tree dies the root provides an easy track for crayfish to tunnel along which again breaks down the integrity of the bank. The only plant suitable for helping to hold banks together is grass due to its small size and shallow root systems.

#### Trees around my ponds will provide wind breaks.

This is completely unnecessary as wind blowing across your ponds is beneficial. Wind blowing over your ponds helps provide some aeration by creating horizontal currents and encouraging vertical mixing, which is highly important for helping to maintain water quality if you do not have supplemental aeration (ie., paddlewheel aerators).

I have lemon scented gums near my ponds and I have heard that the leaves will kill crayfish if they get into my ponds; is this correct?

There is no firm scientific evidence for this; however, anecdotal evidence is that these trees and also peppermints, suppress marron pond production. It would be advisable to remove any lemon scented gums near ponds not just for this reason but for all the other reasons for not having trees around ponds as well.

Trees around my ponds will provide additional food for my Freshwater Crayfish.

This is a very inefficient and uncontrolled method of feeding your Freshwater Crayfish since it would be impossible to quantify the amount of food this system would provide. There are now very good data available on the feed ratios required for optimum production, using pelleted feeds. There are also data to show that Freshwater Crayfish in the wild, which are reliant on terrestrial vegetation for food grow very poorly (at about 1/2 of a well managed pond stock). Excessive quantities of unbroken down leaves and twigs can be a major headache by blocking outlet screens during draining.

# Trees around my ponds will provide an aesthetically pleasing site.

This is a commendable idea but falling branches (and during storms even the tree itself) can damage your overhead bird netting allowing access by predators, as well as then giving the site a run-down look.

#### Trees around my ponds will encourage bird life.

It is nice to have birds around but you do not want to encourage some predatory birds, such as cormorants, herons and kookaburras or birds such as ducks which eat marron feed, by providing them with this sort of roosting perch.

This recommendation for not planting trees too close to ponds, and particularly on the pond banks, does not imply that we advocate a clearing policy.

Produced August 1996 (revised) by Chris Bird, Research Services Division, the Department of Fisheries

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