

# Poor Water Quality Affecting Many Ponds

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Most crawfish farmers have taken advantage of the recent rains to hold a light flood in their ponds. Those rains have softened the ground and enabled some crawfish to start emerging from the burrows. Water quality in the ponds over the next couple of months will affect the survival and growth of young crawfish. If the dissolved oxygen level stays above 1 or 2 ppm, you can expect normal growth until the weather and water gets cold. On the other hand, if oxygen is just barely enough to survive, their growth will be delayed.

In the last few days I've looked at ponds that have rice planted for crawfish forage, harvested rice fields, second crop rice fields and weedy ponds. Oxygen levels in these different ponds was predictable. Where rice plants are growing and little or no dead material is present, the dissolved oxygen is excellent, 2 to 5ppm depending on the time of day. In the other pond situations, I've seen levels mostly below 1ppm! I was able to dip some newly hatched crawfish in all pond types but I wonder how many of those small crawfish will survive, much less grow over the next couple of months.

It is recommended to drain some of the bad water out and then refill with aerated water. This will at least move water in all parts of the pond but don't expect the aerated water to mix throughout the whole pond. Few ponds are set up to effectively circulate water to all parts of the field. That is why the draining and then refilling method is a little more effective. The frequency of draining and refilling will depend on how much rotting vegetation is present.

Unfortunately, the excessive rains in some parishes has resulted in very poor water quality in canals and bayous. This water is dark stained and is very low in oxygen (less than 0.5ppm). Some fish kills have been reported. If this is your only water source, it is especially important to have an aeration screen at the discharge pipe. You will be able to raise the oxygen level to near saturation but it may not retain that level for long. So between the bad water in the pond and bad water in the canals, you probably need to flush the pond frequently over the next month or so.

If you have any question about your particular pond, you can call me or Richard Johnson. My office number in Abbeville is 337-898-4335, Richards number in Crowley is 337-788-4901. Or reach us by email, [mshirley@agcenter.lsu.edu](mailto:mshirley@agcenter.lsu.edu) or [rdjohnson@agcenter.lsu.edu](mailto:rdjohnson@agcenter.lsu.edu)