Mike Sipes Oxygen intensive fish ponds yield great financial returns

Oxygen improves the growing of tilapia by supplying oxygen needs on a 24/7 basis because the oxygen supports the aerobic digestion of all foods whenever the tilapia needs or wants to eat. The supplying of oxygen to intensive growing systems has been accepted for many years, but the idea of supplying oxygen to dirt ponds has only recently been looked at.

I am not sure why this is but the response of tilapia to levels of dissolve oxygen in our tank system suggest that it will really do the job.

With the system of u-tube injection of oxygen that we pioneered more than 30 years ago and have perfected as we built different styles and improved on the efficiency (which now has 99 percent of the oxygen delivered to the tanks the fish are grown in.) and total oxygen moved and dissolved.

The total square feet in one acre is 43,560 square feet.

If we place enough pounds of pennyfish in cages in the lake to equal an average of one pound per cubic foot we will be using the biomass of these 43,560 pounds of tilapia to produce a daily production of 1.765 percent times the total stocking density which will be grow in correct systems at approximately 766 pounds of weight must be distributed . Since we stock each each new cage each week we seperated the tilapia stocked into weekly size groups so the growth is sustained by the total weigh of all live tilapia in he growing system times the growth rate under which the tilapia are grown. the conditions

The fact is that the total weight of biomass of growable tilapia in the system means that the poundage is much higher and more controllable in this system because the increased oxygen system is needed care for this increased load. The total pounds grown can be extended to much higher numbers because of the constant steady supply of oxygen from the u-tube and in fact we have maintained without difficulty stocking densities between 6-7 pounds with our system.

We have been able to stop almost every difficulty that we got into to because we had a dependable highly efficient u-tube that delivered over 100 parts per million of dissolved oxygen when it was needed and distributed it almost instantly throughout all of the fish cages in the

growing system whether the system is a wild lake a pond or a concrete tank, indoor or out, a constructed pond or lake. The key to why this method works is our ability to controll the oxygen level for all of the tilapia All of the time. This means that the tilapia are always at there best growth rate. The average we use is one and three quarter of a percent as the average growth of the total biomass in the cages in a system where the system is kept at an average of 80 degrees farenheight and clean water fresh water or recycled.

The distributing oxygen evenly throughout each tank has proven to be very easy and very reliable with The stoking density calculated for each cubic foot can safely be 1, to 7 pounds of pennyfish per cubic foot. Each pound of all sizes can add new weight at just under 2 percent per day of the weight on the previous day or 1.76 percent of growth per day of the total previous days previous days weight. I have a sort of algorithm that helped me come up with this growth perception. So using these numbers and figuring the total biomass of the pond we can get a good idea o how many pounds of each size need to be included in the biomass to get the best return from each new project.

At a weight of one pound of pennyfish per cubic foot , we will have a total weight of 43,560 pounds of pennyfish per cubic foot of pond. The size of each pennyfish in the lake can be from one ounce up to two pounds per pennyfish, to make up the total weight stocked to reach a total of one pound per cubic foot.

If we have clean water and the appropriate pounds of feed we will see a growth of 1.76 percent of that total biomass each day. ()
the total pounds of pennyfish that are in the lake will grow on each day of growth at the rate of just under 2 percent or 1.76 percent per day of the previous days total weight.

The total number of pounds stocked in the whole lake to achieve a stocking density of one pond per cubic foot is then 43,000 pounds per pound per square foot of the lake

So, if we stock one pound of pennyfish per cubic food the will have a total of 43,560 pounds times 1.76 percent per pound which will be 767 pounds per day for the first day and approximately seven times 767 pounds for each consecutive day. in a week (once we pass the magic day) we should be able to harvest

5,369 pounds of pennyfish each week. We have grown enough pounds of fish in systems for over 10 years to understand and utilise these numbers, but it has taken me most of that time to

take a look at the revenant numbers and draw some interesting conclusions.

An Intensified one acre pond set WITH OUR system kept at 85 degrees F. where you can feed and oxygenate 50,000 pounds of pennyfish will produce 5,369 pounds a day provided the temperature is right *85-88 degrees farenheigt, the water quality is good and the feed is at least 32 percent protein with no animal fat. At least 9,000 pounds of this feed are fed to the pennyfish over the previous weeks. Nine thousand pounds of dissolved oxygen must also be produced, dissolved and utilised by the fish to grow.
We have put as many as 7 pounds of pennyfish per cubic foot in intensive tanks and have seen the fish really grow out that speed, so stocking one pound of pennyfish per cubic foot should be easy in comparison. Go to you tube and type in the words "cherry" and "snapper" in the search area and view my intensive farm, built and run 10 years ago, this was an intensive tank where the o2 level is maintained by a u-tube designed by us and supplied with sufficient oxygen to maintain this stocking density should be able of producing over 475,000 pounds per year which will bring in at $3.00 per pound or about $1,423,858 each year.

Spread sheets exist included which estimates the cost of construction, management cost at under 50 percent of the total estimated cost.

$1,423,858 is the projected income from a one acre pond with a stocking density of one pound per cubic foot .

At a stocking density of five pounds of pennyfish per cubic foot the revenues from a one acre pond are significantly higher at $7,119,294 per year.