INTENSIVE SYSTEM ONE ACRE OF WATER AT A STOCKING DENSITY OF ONE POUND PER ACRE

USA - Fish Farming

One acre intensive pond controlled with high dissolved oxygen (12-15 ppm)
12 Dec 2009

The total square feet in one acre =43,560 square feet. so we place enough pounds of pennyfish IN CAGES in the POND to equal one pound per cubic foot

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 JUST UNDER 2 % PER DAY OF THE WEIGHT ON THE PREVIOUS DAY OR 1.76% OF GROWTH PER DAY

OF THE PREVIOUS DAYS WEIGHT...

AT WEIGHT OF ONE POUND OF PENNYFISH PER CUBIC FOOT, WE WILL HAVE A TOTAL WEIGHT OF 43,560 POUNDS OF PENNYFISH PER POND.

THE SIZE OF EACH PENNYFISH IN THE POND CAN BE FROM ONE OUNCE UP TO TWO POUNDS PER PENNYFISH, TO MAKE UP THE 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% OF THAT TOTAL POUNDAGE (STANDING CROP.)

THE TOTAL POUNDS OF PENNYFISH THAT ARE IN THE LAKE WILL GROW ON EACH DAY OF GROWTH AT THE RATE OF JUST UNDER 2% OR 1.76% 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 SQUARE FOOT OF water in THE LAKE

SO, IF WE STOCK ONE POUND OF PENNYFISH PER CUBIC FOOT THE WILL HAVE A TOTAL OF 43,560 POUNDS TIMES 1.76 % PER POUND WHICH WILL BE 880 POUNDS PER DAY FOR THE FIRST DAY AND APPROXIMATELY SEVEN TIMES 767 POUNDS FOR EACH CONSECUTIVE 7 DAYS OR WEEK.. SO, IN A WEEK(ONCE WE PASS THE *MAGIC DAY) WE SHOULD BE ABLE TO HARVEST 5,369 POUNDS.

SO AN INTENSIFIED POND SET UP TO FEED AND OXYGENATE 50,000 POUNDS OF PENNYFISH WILL PRODUCE 5,367 POUNDS A DAY PROVIDED THE TEMPERATURE IS RIGHT, THE WATER IS CLEAN, AND THE FEED IS GOOD. AND AT LEAST 9,000 POUNDS ARE FED TO THE PENNYFISH OVER THAT WEEK, AND 9,000 POUNDS OF DISSOLVED OXYGEN IS PRODUCED FOR THE ONE ACRE INTENSIVE POND

WE HAVE PUT AS MANY AS 7 POUNDS OF PENNYFISH PER CUBIC METER IN INTENSIVE TANKS AND HAVE SEEN THEM GROW OUT THAT SPEED, SO STOCKING ONE POUND OF PENNYFISH PER CUBIC FOOT SHOULD BE EASY IN COMPARISON.