

*Director's
Digest*



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U. S. AQUACULTURE READY FOR EXPANSION, SAYS SPECIALIST

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ATLANTA, GA. - EVEN MORE EXTENSIVE CHANGES MAY BE FORTHCOMING IN THE 1990S AS THE AQUACULTURE INDUSTRY CONTINUES TO EXPAND INTO NEW AREAS, ACCORDING TO DAVID HARVEY, AGRICULTURAL ECONOMIST AT THE U. S. DEPARTMENT OF AGRICULTURE'S ECONOMIC RESEARCH SERVICE.

SPEAKING AT USDA'S ANNUAL AGRICULTURAL OUTLOOK CONFERENCE NOV. 28, HARVEY SAID THAT THE DEVELOPMENT OF AQUACULTURE HAS BEEN ONE OF THE BRIGHT SPOTS IN AGRICULTURE IN THE LAST FEW YEARS AND PERHAPS NO OTHER COMMODITY CARRIES AS MUCH POSSIBILITY OF CHANGE.

MORE SPECIES ARE LIKELY TO BECOME AVAILABLE TO PRODUCERS IN THE FUTURE AS RESEARCHERS AND PRODUCERS EXPERIMENT WITH GROWING OPERATIONS AND MARKETING TECHNIQUES, ACCORDING TO HARVEY.

NEVERTHELESS, HE SAID, THERE ARE SOME STUMBLING BLOCKS AHEAD FOR THE INDUSTRY, SUCH THINGS AS WATER QUALITY, CONTAMINATION, WASTE DISPOSAL, POTENTIAL GOVERNING PERMITS AND REGULATIONS - INCLUDING MANDATORY INSPECTIONS.

EVEN WITH THOSE HURDLES, HE SAID, EXPANSION WILL LIKELY CONTINUE. "WITHIN

THE NEXT DECADE, THE AQUACULTURE INDUSTRY IN THE U.S. IS EXPECTED TO CONTINUE TO EXPAND, BUT THE RATE OF EXPANSION WILL PROBABLY SLOW FROM THAT SEEN IN THE 1980s. INCREASES IN PRODUCTION WILL VARY CONSIDERABLY FROM SPECIES TO SPECIES, WITH THE PRODUCTION OF NEWLY DEVELOPING SECTORS OF THE INDUSTRY BEING THE FASTEST GROWING," HARVEY SAID.

DOMESTIC AQUACULTURE PRODUCTION MAY BE ABLE TO REDUCE THE GROWTH IN U.S. IMPORTS OF FISH AND SHELLFISH PRODUCTS, BUT IT WILL NOT BE ABLE TO ELIMINATE IMPORTS COMPLETELY BECAUSE OF THE MAKEUP OF THE PRODUCTS IMPORTED, HE SAID.

WHILE DOMESTIC AQUACULTURE CAN PRODUCE A WIDE VARIETY OF PRODUCTS COMPETITIVELY WITH OTHER AREAS OF THE WORLD, DOMESTIC SHRIMP FARMING, FOR EXAMPLE, MAY NEVER MEET MORE THAN A SMALL PERCENTAGE OF TOTAL U.S. DEMAND, DUE IN PART TO HIGHER LAND AND LABOR COSTS, HARVEY SAID.

THE DOMESTIC AQUACULTURE INDUSTRY SHOULD CONTINUE TO GROW, BENEFITING FROM THE MARKETING OPPORTUNITIES RESULTING FROM THE UNEXPECTED GROWTH IN DEMAND FOR SEAFOOD, HE SAID. THE LARGEST SECTOR IN U. S. AQUACULTURE IS PRODUCTION OF CATFISH, AND THE OUTLOOK FOR THE INDUSTRY AS A WHOLE WILL BE AFFECTED BY CATFISH, HARVEY ADDED.

"CURRENTLY, CATFISH PROCESSING VOLUME IN 1990 IS EXPECTED TO BE UP 9-12% OVER 1989, AND TOTAL BETWEEN 375 AND 385 MILLION POUNDS. IN 1991, THE CATFISH INDUSTRY SHOULD CONTINUE TO SHOW GAINS IN PROCESSING NEAR OR AT THE DOUBLE-DIGIT LEVEL. REPORTED INVENTORY LEVELS OF ALL SIZES OF CATFISH AND ANTICIPATED ACREAGE EXPANSION ARE ADEQUATE TO SUPPORT THIS TYPE OF EXPANSION CONTINGENT ON NO EXTREMELY ADVERSE WEATHER," HARVEY SAID.

DEFLATED PROCESSOR PRICES IN 1990 ARE CLOSE TO THE 1980 LEVEL, HE SAID, ADDING, "THIS STABILITY IN REAL WHOLESALE CATFISH PRICES HELPED PROCESSORS TO CONTINUE TO EXPAND SALES OF CATFISH RELATIVE TO OTHER SEAFOOD PRODUCTS. HOWEVER, REAL WHOLESALE PRICES FOR SOME MEAT AND POULTRY PRODUCTS HAVE FALLEN SINCE 1980. TO COMPETE AGAINST THESE PRODUCTS, CATFISH PROCESSORS STILL HAVE TO USE THE INFLUENCE OF FISH'S IMAGE AS A HEALTHY FOOD."

A SURVEY SHOWED SALES FOR THE TROUT INDUSTRY FOR THE YEAR ENDED AUG. 31 WERE \$76.9 MILLION, AN INCREASE OF 7% FROM THE SAME PERIOD A YEAR EARLIER.

HIGHER PRODUCTION IN IDAHO WAS PARTIALLY OFFSET BY DECLINES IN CALIFORNIA, NORTH CAROLINA AND UTAH. THE WEIGHTED AVERAGE PRICE FOR FOOD-SIZED FISH ROSE TO \$1.14/LB., UP 6%.

"TROUT PRODUCTION SHOULD CONTINUE TO HAVE THE GROWTH IN PRODUCTION IT HAS SHOWN OVER THE LAST SEVERAL YEARS. INCREASES IN PRODUCTION WILL COME CHIEFLY FROM HIGHER PRODUCTIVITY AT EXISTING TROUT FARMS. THE MAJOR FACTOR LIMITING OVERALL EXPENSION OF THE INDUSTRY IS THE LACK OF SUITABLE SITES FOR PRODUCTION FACILITIES," HE SAID.

RELIABLE FIGURES ON THE PRODUCTION OF HYBRID STRIPED BASS ARE NOT YET AVAILABLE, BUT INDUSTRY ESTIMATES HAVE 1990 PRODUCTION INCREASING A CONSIDERABLE AMOUNT FROM THE PREVIOUS YEAR.

WITH THE LIFTING OF RESTRICTIONS ON SELLING HYBRID STRIPED BASS, A PRIME MARKET IS BEING OPENED, HARVEY SAID. MANY GROWERS WILL PRODUCE THEIR FIRST CROP IN 1990 AND 1991, HE SAID.

WHILE SOME OF THE BASIC INFRASTRUCTURE IS NOW IN PLACE, SUCH AS FINGERLING SUPPLIERS AND GROWOUT OPERATIONS, A GREAT DEAL OF WORK REMAINS. FEED TRIALS, OPTIMUM STOCKING DENSITIES AND GROWTH REACTIONS TO TEMPERATURES AND AERATION ARE AMONG THE AREAS BEING ANALYZED TO INCREASE PRODUCTION EFFICIENCY," HE SAID.

TILAPIA

U.S. PRODUCTION OF TILAPIA SEEMS TO BE POISED TO EXPAND RAPIDLY IN THE NEXT DECADE, HE ADDED. ESTIMATES OF 1990 PRODUCTION RUN FROM 6 TO 10 MILLION POUNDS OF LIVE FISH, BUT THE INDUSTRY'S PRODUCTION COULD DOUBLE IN THE NEXT FEW YEARS, HARVEY SAID. A NUMBER OF LARGE COMPANIES HAVE ENTERED TILAPIA PRODUCTION AND ARE MOVING RAPIDLY TO EXPAND PRODUCTION, HE SAID.

TILAPIA GROWERS ARE NOW WORKING ON EFFORTS TO INCREASE THE EFFICIENCY OF THEIR GROWING OPERATIONS BY DEVELOPING STRAINS THAT ARE MORE DISEASE RESISTANT, HIGHER YIELDING AND BETTER FEED CONVERTERS, HE SAID. GROWERS ARE WORKING WITH DIFFERENT FEED FORMULAS, COMPARING CULTURAL PRACTICES AND EVALUATING WAYS TO ACHIEVE SINGLE-SEX POPULATIONS, ACCORDING TO HARVEY.

"PRODUCERS ARE EAGER TO TAKE ADVANTAGE OF TILAPIA'S RAPID GROWTH RATE, ITS CHI. ADVANTAGE," HE EXPLAINED.

TILAPIA FARMING IS DEVELOPING INTO A WORLDWIDE BUSINESS, HE SAID. "AS THE MARKET FOR TILAPIA EXPANDS, MORE FOREIGN PRODUCERS WILL BEGIN TO TARGET THE U.S. MARKET," HE WARNED.

SALMON

SALMON PRODUCTION HINGES ON WHETHER AQUACULTURALISTS AND FISHERMEN CAN COME UP WITH THE RIGHT MIX OF PROMOTION AND NEW PRODUCTS TO KEEP DEMAND IN LINE WITH THE INCREASING WORLDWIDE SUPPLY, HARVEY SAID.

"WITH U.S. NET PEN PRODUCTION OF SALMON AT ONLY 10-12 MILLION POUNDS, DOMESTIC SALMON FARMERS HAVE LITTLE INFLUENCE ON MARKET PRICES," HE SAID. THE TOTAL SALMON MARKET IS DOMINATED BY U.S. WILD HARVEST AND FOREIGN FARM-RAISED PRODUCTION, ESPECIALLY FROM NORWAY, HARVEY SAID.

OTHER SPECIES

THE GREATEST POTENTIAL FOR AQUACULTURE IN THE U.S. MAY LIE IN THE LARGE NUMBER OF SPECIES THAT MAY BE POSSIBLY GROWN, HE SAID, ADDING THAT SOME NEWER SPECIES UNDER CONSIDERATION FOR FARM PRODUCTION MAY ALLOW AQUACULTURE TO EXPAND TO NORTHERN STATES.

AMONG THE POSSIBLE SPECIES FOR INCREASED PRODUCTION ARE STURGEON, ARCTIC CHAR, WALLEYE AND YELLOW PERCH, HARVEY SAID.

A FEW OPERATIONS IN CANADA ARE ALREADY PRODUCING ARCTIC CHAR, AND RESEARCH IS UNDERWAY ON THE PRODUCTION POTENTIAL OF WALLEYE AND PERCH, ACCORDING TO HARVEY. "IF THEY CAN BE GROWN ECONOMICALLY, THEY WOULD PROBABLY HAVE FAVORABLE CONSUMER ACCEPTANCE, AT LEAST IN THE MIDWEST," HE SAID.