

Michigan Aquaculture Association

October 2003 Newsletter

President's Message

Fall is finally here, and with it some unseasonably cold weather. Hopefully this will spur on the Fall stocking season and all will have good success.

2003 has been a year filled with challenges so far. Major issues in Lansing have consumed a large amount of my time as President, including the now finalized designation of the Pine and Upper Manistee Natural River Districts, the imposition of fees on holders of NPDES permits, the loss of Dr. Doug Hoort from the Aquaculture program at MDA, and the first meetings of the MDA Aquaculture Advisory Committee.

The Designation of the Pine and Upper Manistee Natural River Districts may have a negative effect on any aquaculture operations that are currently established in those areas. The Natural River Rules prohibit expansion of existing operations or establishment of new operations. Operators must also be aware of the Green River Trout Farm case in which MDNR attempted to prohibit Green River Trout from operating in a Natural River District because of a lapse in operation that MDNR claimed negated the grandfathered status of the farm. We are still awaiting the finalization of a proposed settlement that would allow Green River to operate. If you have any questions about how this may impact you, contact me at (231) 389-2514.

Issues with the State Budget shortfall have brought on some major concerns as our lawmakers attempt to balance the budget on fees. The budget shortfall has also prohibited hiring someone to fill Dr. Doug Hoort's position after he left for a new position with USDA. The fee system is being referred to as "fees for services." In some instances this is true, but in many cases, the fees are just a creative way of forcing folks to pay a new tax. I am very concerned that the current trend will continue, with many new fees popping up to help finance a government in Lansing that is simply too large for our current tax base to afford.

Currently, the Association is working to put together a schedule for testing of aquaculture facilities to be carried out by MDA. This program is only for those that wish to certify their facilities for public water stocking or for shipping interstate. Due to budget shortfalls, MDA was on the verge of not collecting the samples for this vital testing program. Animal Industry Division Director, Dr. Joan Arnoldi

agreed to continue the sample collection if the Association could orchestrate an efficient regional schedule that would minimize the amount of time required of MDA field vets. Please contact Association Vice President Jerry Kahn at (989) 724-5241 for more information.

I have continued to be involved in the Federal USEPA process to look at developing national guidelines for discharges for aquaculture facilities. Although the process continues to consume a good deal of time and effort, there is nothing new to report, only that the process is moving ahead, without any word as to the final outcome.

Be sure to mark February 12 and 13 on your calendars as the 2004 Michigan Aquaculture Association Annual Meeting, to be held at McGuire's in Cadillac again this year. The program for the meeting is still being developed and should prove to be beneficial. Elections this year will be for President and one Director. Your participation in this process is very important, so please plan to attend.

I hope that everyone has a busy Fall.

Dan Vogler, President

Update - Green River Trout Farm

Some of you may recall that I posted an update on the Green River Trout Farm situation on the egroup this past spring. After two years of legal battles, the DNR had agreed to discuss a settlement, the terms of which were discussed without lawyers present.

GRTF had offered ten major concessions. In return, the DNR would agree to remove the dam at it's own expense (and/or with outside assistance), and would guarantee that the volume of water entering the farm would not be altered or interrupted. The plan was to build a series of pools and waterfalls, dropping the elevation more gradually and allowing migratory fish to enter the upper Green River.

Most recently, James Piggush, Assistant Attorney General assigned to the DNR made two major changes to that agreement. First, he felt that the state could not be obligated to maintain water elevations, and second, that we should agree never to sue the state for anything associated with the case or the removal of our dam.

In one respect, Mr. Piggush was right. It's difficult, if not impossible to make such assurances in advance of any feasibility studies, engineering

studies, and at least preliminary engineering plans and sequences of construction. In various communications with the DNR, I reminded them that the State of Michigan would NEVER award a construction contract of any kind without guarantees and assurances from its contractors. For instance, the state would not award a contract to build a bridge without forcing the contractor to guarantee minimum dynamic load capacities, clearance elevations and the like. Finally, Mr. Piggush has relented, and suggested that we delay any dealings with the dam in lieu of studies, and that in the meantime the DNR execute an agreement that will allow us to function as a trout farm legally and without interference from that department. It would seem that cooler heads are prevailing.

However, it should be mentioned that it has been four months since the initial settlement meeting, and today we still do not have an executed agreement – although it appears to be in the works.

The GRTF situation should be a lesson to all who have dealings with state agencies. We were lured into a permit process, denied, then hung feet first in the bottomless well of Administrative Law. Interestingly, our experience with Administrative Law was a complete and total waste of time and money. Administrative Law Judge Chris Shafer was very clever in his finding against us. Are you sitting down? The good Judge decided that, since the previous operator testified that the farm did \$10,000 in gross sales in 1999, that this amount was “insufficient” to be considered “commercial use”. I point out that in 2000, most of the cherry farmers in the Grand Traverse region would have been thrilled with \$10,000 in sales, and that the IRS and the Supreme Court of Michigan don’t establish thresholds of gross sales or profit....

The lesson is this: Know the law before you entertain the idea of applying for any sort of permit. If there is a dispute, go directly to the superiors in that agency and make every effort to keep your case OUT of Administrative Law.

Finally, I’d like to thank so many of you who offered great advice and support. I hope that the Michigan Aquaculture Association grows, and that the membership remains active. The key to our future lies with unity. Please feel free to drop in for a visit anytime!

With kind regards,

Steve Hallberg
Green River Trout Farm
1867 S. M-66
Mancelona, MI 49659

Good-Bye From Dr. Doug Hoort

Bob Baldwin asked me to write an article for the newsletter and I had trouble saying no. I kind of figure I owe him big time for all his help during my tenure as the aquaculture program manager.

So I will take this opportunity to say good-bye to everyone.

For those of you who have not heard, I have taken a position with the United States Department of Agriculture, making the switch in August of this year. I really enjoyed my time as the aquaculture program manager. It was one of the most interesting and rewarding jobs I have ever held. The reason I can say that, is you the producers. The program accomplishments were due to all the work and help from the aquaculture industry.

Sometimes you need to look back to realize all that work was worth it. So I would like to take a quick review of my time working with the industry.

MEMORANDUM OF UNDERSTANDING

A MOU between the DNR and MDA was finished and signed. Although a relative small document, a lot of work went in to it to get a document the aquaculture industry, DNR, and MDA all could agree with. There were many trips to Lansing by representatives from MAA. Farm Bureau helped with their input. The various long distance providers also made a lot of money over all, the number and length of the phone calls working through the MOU. There was a point that the whole effort seemed to stalled, however with some key support from Dr. Arnoldi and Kelly Smith a document was signed by MDA and MDNR.

No, the current MOU does not solve all the problems, but I feel it was a good start. It also sets the stage to for sitting down and discussing problems and attempting to mutually solve them. It opens the lines of communication.

STOCKING PERMITS

When this document was done, I think all of us had the attitude - it was about time. It solved a lot of the problems that had plagued the industry. Making the switch from a verbal statement at the last minute on what the rules were for stocking; to a written document available for the producer and clients to read - was a vast improvement. Adding to that, the clarification of who was responsible for getting the actual permit made this a much needed document. I have to give Gary Whelan from the

DNR the credit for all the effort he put into the document. On the aquaculture side, Dan Vogler deserves credit for reviewing and suggesting changes to the final draft.

HEALTH ISSUES

To see health issues, be treated like any other livestock health problems, was a great step forward. I think one of the turning points to make this happen was Michigan State University hiring of Dr. Faisal. Aquaculture had the fish health expert it needed to diagnosis and solve fish health problems. Remember Whirling Disease? What a great benefit of having Dr. Faisal in Michigan, the ability to clear the stigma of having the disease on your farm.

LEGISLATION

The big accomplishment here was that nothing happened. There were many attempts to introduce legislation that would have drastically changed the rules for aquaculture. Remember to thank Farm Bureau, your association, and all those people who made the trips to Lansing for making nothing happen.

THE FUTURE

Looking back, how did things get accomplished? They got accomplished by involvement of the industry. Due to other time demands of my position, all I could be was a resource as opposed to a driving force. All those unpaid people making the trips to Lansing, making those phone calls, working with Farm Bureau; that is what made it happen. I no longer speak for the Michigan Department of Agriculture but my personal observations of the budget problems in Lansing tell me there is not a lot of help coming from Lansing. Your industry will have to take the lead, identify the issues, and get to work on them. Be aware that due to the nature of your industry, you will have to address issues that may not be important to you - but are important to the public or to other state agencies. I would urge the industry to be proactive and beat your critics to the punch. Solve the problems before your critics attack you!

Anyhow, my daughter says that I tend to preach to much. Let me switch gears and sign off and say thank you. The 2 ½ years I had as an aquaculture program manager were 2 ½ years that I immensely enjoyed!

Doug

Predator Problems?

By: Steve Ouwinga

Do you know how many fish you lose to predators each year? It might very well be more than you think. While there are problems with mink, otter, and humans, birds seem to be the deadliest in term of fish eaten or injured. Predatory birds also present a serious risk of spreading disease from one area or hatchery to another. Another interesting fact about the great blue heron is its ability to feed throughout the night hours. Many a time I have heard them leave when out doing those late hour checks.

You may want to consider allowing a serious trapper to come in for those furry predators, but the only serious way I know of eliminating the blue herons, green herons and the belted kingfishers is with a U.S. Fish and Wildlife depredation permit, which costs just \$25 per year.

You must make every effort to scare or deter first before or in conjunction with a permit for lethal control. Such tactics include propane cannons, dogs, wires overhead, fencing, balloons, ribbon, etc. However, as you may well know, these tactics can be costly and time consuming with limited results.

If you want to go the legal route for lethal control, and I suggest you consider it if you are having serious problems, contact Peter Butchko, state director of USDA-APHIS Wildlife Services at 517/336-1928 or peter.h.butchko@usda.gov Office address is 2803 Jolly Road, Suite 160, Okemos, MI 48864. Good Luck!

NOTICES

52565 Federal Register / Vol. 68, No. 171 / Thursday, September 4, 2003 / Notices

DEPARTMENT OF AGRICULTURE

Rural Business-Cooperative Service
Notice of Funds Availability (NOFA)
Inviting Applications for the Value-Added Agricultural Product Market Development Grant Program (VADG)
(Independent Producers)

AGENCY: Rural Business-Cooperative Service, USDA.

ACTION: Notice.

SUMMARY: The Rural Business-Cooperative Service (RBS) announces the availability of \$27.7 million in competitive grant funds for fiscal year 2003 to help independent agricultural producers enter into

value-added activities. RBS hereby requests proposals from eligible independent producers, agricultural producer groups, farmer or rancher cooperatives, and majority-controlled producer-based business ventures interested in a competitively awarded grant to fund one of the following two activities: (1) Developing feasibility studies or business plans (including marketing plans or other planning activities) needed to establish a viable value-added marketing opportunity for an agricultural product; or (2) acquiring working capital to operate a value added business venture or an alliance that will allow the producers to better compete in domestic and international markets. In order to provide program benefits to as many eligible applicants as possible, applications can only be for one or the other of these two activities, but not both. Value-added products are defined as follows: (1) A change in the physical state or form of the product (such as milling wheat into flour or making strawberries into jam); (2) the production of a product in a manner that enhances its value, as demonstrated through a business plan (such as organically produced products); (3) the physical segregation of an agricultural commodity or product in a manner that results in the enhancement of the value of that commodity or product (such as an identity preserved marketing system). As a result of the change in physical state or the manner in which the agricultural commodity or product is produced or segregated, the customer base for the commodity or product is expanded and a greater portion of revenue derived from the marketing, processing, or physical segregation is made available to the producer of the commodity or product. Value-added also includes using any agricultural product or commodity to produce renewable energy on a farm or ranch.

The maximum award per grant is \$500,000. In order to maximize the distribution of program benefits, smaller grant requests under \$500,000 will receive priority points. Priority is also being given to projects producing energy from biomass or demonstrating profitable use of innovative technologies.

DATES:

Applications must be completed and submitted to the appropriate State USDA Rural Development office as soon as possible, but no later than 4 p.m. on October 20, 2003. Applications received after October 20, 2003, will not be considered. Late applications will not be accepted and will be returned to the applicant. Applicants must ensure that the service they use to deliver their applications can do

so by the deadline. Due to recent security concerns, packages sent to the agency by mail have been delayed several days or even weeks.

ADDRESSES:

Submit proposals and other required materials to your State USDA Rural Development Office. RBS is strongly encouraging the electronic submission of proposals. If proposals are electronically submitted, signed paper copies of the three required forms, SF-424 "Application for Federal Assistance," SF-424A "Budget Information—Non-Construction Programs," and SF-424B "Assurances—Non-Construction Programs," need to be mailed or faxed to the State office.

Michigan

Lee Bambusch, USDA Rural Development, 3001 Coolidge Road, Suite 200, East Lansing, MI 48820, (517) 324-5216, lee.bambusch@mi.usda.gov

MAA Elections

Annual elections are coming up at the next annual meeting. The positions of President and one at-large Director. If you would like to run for either of these position, please contact Steve Ouwinga 231/834-7720 for the placement of your name on the ballot before the next Newsletter publishing date January 5th, 2004.

North Central Regional Aquaculture

The NCRAC Newsletter

(Editor note: Republished for members that may not be on the NCRAC mailing list)

Volume VII No. 2

From the Director's Office

Welcome to the Fall 2003 issue of the North Central Regional Aquaculture Center's (NCRAC) Newsletter. We hope that all of you engaged in aquaculture-related activities have found 2003 to be a good year.

On February 7-9, 2003, NCRAC held its annual program planning meeting in East Lansing, Michigan. At this meeting, the Industry Advisory Council (IAC), with input from the Technical Committee (TC), developed a prioritized list of selected topics based on the Center's white papers. This prioritized list was presented to the NCRAC

Board of Directors, who after careful deliberation, approved development of two new project areas. One was on nutrition and the other on aquaculture drugs. The nutrition project is to be a 2-year undertaking with up to \$200,000 in funding. The project will be looking at cost effective fish meal-free diets for hybrid striped bass and yellow perch. If approved by USDA, work will begin September 1, 2004.

The Board also allocated up to \$235,000 for the studies and documentation that would be required by FDA's Center for Veterinary Medicine for the approval of at least one new aquaculture drug. The top priority drug, as suggested by the IAC, was 17 α -methyltestosterone and the second was Aqu-S. All of the drug-related activities are to be coordinated and overseen by Roz Schnick, the National Coordinator for Aquaculture New Animal Drug Applications. The funds will be "fast-tracked" so that efforts may start as soon as possible pending USDA approval.

I also have a great piece of news, and that is that the Regional Aquaculture Center (RAC) program received an increase in this year's funding from the federal government. What an accomplishment under these tight budgetary times. For the last 10 years, the RAC program has been funded at \$4 million per year. Those funds are equally divided by USDA among the five regional centers. This year the RAC program has received \$4.5 million, a 12.5% increase! That increase is due to the efforts of a number of people, but I especially want to thank Fred Binkowski, who played an important role in obtaining this increase. Thanks Fred, and thanks also to Mike Blizek, Curtis Harrison, and Bob Calala who have supported the RAC program either through written testimony or direct contacts with federal legislators.

As always, please feel free to contact either myself or Joe Morris, the Associate Director at Iowa State University, if you need assistance, wish to make comments, or voice your concerns. You can find our phone and fax numbers as well as our e-mail addresses on the inside back cover of this newsletter.

I'd also like to encourage you to visit our Web site at <http://ag.ansc.purdue.edu/aquanic/ncrac> for additional information about the Center and on-line access to almost all of our publications including annual progress reports, fact sheets, technical bulletins, newsletters, and white papers.

Sincerely,
Ted Batterson, Director

National News

STATUS OF DRUG APPROVAL FOR 17 α -METHYLTESTOSTERONE

Prepared by Roz Schnick, National Coordinator for Aquaculture New Animal Drug Applications

BACKGROUND

The drug, 17 α -methyltestosterone (MT), is needed to manipulate the gender of a variety of fish (e.g., tilapia, percids, sunfish, salmonids, esocids, ornamental fish, etc.) used in aquaculture. In 1995, Auburn University gained an Investigational New Animal Drug (INAD) exemption for generating data on MT for tilapia. Rangen, Inc. became the manufacturer and potential New Animal Drug Application (NADA) sponsor of MT medicated feed. The U.S. Food and Drug Administration's Center for Veterinary Medicine (CVM) must accept as complete a set of six technical sections to obtain a NADA approval. These include (1) Product Chemistry, (2) Mammalian Safety, (3) Environmental Safety, (4) Human Food Safety, (5) Target Animal Safety, and (6) Efficacy. Under the INAD, Auburn University (1) collected the efficacy data generated on tilapia, (2) wrote and submitted reports on efficacy and target animal safety on MT for tilapia, and (3) wrote and submitted an environmental assessment for tilapia in regard to environmental safety. Rangen, Inc. prepared and submitted a Product Chemistry Technical Section (PCTS). After reviewing the submitted technical sections, CVM requested (1) a final report and Freedom of Information summary on the efficacy and target animal safety data on MT for tilapia, (2) a series of stability studies under the PCTS and a more accurate analytical method in feed, and (3) a biodegradation study under the environmental Safety Technical Section and a more accurate analytical method in water. CVM also stated that the requested analytical methods needed to be developed and approved before any of the stability or biodegradation studies were undertaken.

Previously, NCRAC had authorized (1) \$5,000 for Auburn University to help complete the environmental assessment on MT for use in tilapia and (2) \$27,000 for Southern Illinois University-Carbondale and the University of Wisconsin-Madison to complete target animal safety and efficacy studies on percids, respectively. It became apparent to NCRAC, Auburn University, Rangen, Inc., and U.S. producers of the various fish species, which need MT for commercial aquaculture production, that more funding was needed to complete an original NADA.

CURRENT ACTION

As noted on Page 1 NCRAC's Board authorized up to \$235,000 for activities that would lead to the approval efforts for aquaculture drugs of high priority to producers in the North Central Region. The National Coordinator for Aquaculture New Animal Drug Applications (National NADA Coordinator), with members of NCRAC's IAC and TC, identified the remaining data requirements that are impeding approval of MT for an original NADA approval in tilapia. The NCRAC Board also indicated that if the requirements for an original approval on tilapia were completed, then other studies could be conducted that would gain supplemental NADA approvals of MT for sunfish and other species of interest to the NCR (i.e., hybrid striped bass, trout, percids, and esocids). The National NADA Coordinator and the NCRAC Director were charged by the NCRAC Board to develop a Call for Statements of Interest for the needed studies and proceed with selecting one or more participants to complete the objectives as soon as possible. A Call for Statements of Interest has been produced and distributed throughout the aquaculture industry; deadline for submission was September 26, 2003. Individuals who would like more information on these objectives or have questions on technical issues are directed to contact Rosalie (Roz) Schnick, National Coordinator for Aquaculture New Animal Drug Applications, Michigan State University, 3039 Edgewater Lane, La Crosse, Wisconsin 54603-1088; phone: (608) 781-2205; fax: (608) 783-3507; e-mail: RozSchnick@centurytel.net

New Fact Sheets on Yellow Perch Diseases

The Virginia Cooperative Extension Service now has two fact sheets available that assist aquaculturists in identifying and treating various diseases in yellow perch. The first fact sheet provides a general overview of common signs and causes of disease in yellow perch. This document also includes some general information on disease prevention and control.

The second fact sheet deals specifically with *Trichodina* and associated diseases that are common parasites of yellow perch. In addition to identification, control and prevention are presented. Both of these fact sheets are available at www.cfast.vt.edu (go to the Publication section, archived News subsection). (source: CFAST Newsletter, volume 6, Issue 3, December 2002)

New Fact Sheet on Herbicide Applications

A new fact sheet that focuses on herbicide safety, technology, and application techniques has been produced by the Southern Regional Aquaculture Center (SRAC). The information in this fact sheet is important to aquaculturists because only six of 200 registered herbicides are labeled for use in U.S. aquaculture. This fact sheet as well as many others can be found at the SRAC Web site. <http://www.msstate.edu/dept/srac/>

Regional News

New Sunfish Culture Guide

A recent addition to the NCRAC Culture Series has now been completed. The Sunfish Culture Guide is a 102-page manual that was edited and written by Joe Morris and Chuck Mischke, Iowa State University, and Don Garling, Michigan State University. The 12 chapters in this text cover various aspects of sunfish culture including, in part, culture methods, hybridization, fish health, and fee-fishing.

This publication is available as a 3-hole punch insert (EDC-0263) for \$25.85 (\$19 plus \$6.85 shipping and handling) from ISU University Extension Distribution. International shipping rates apply to all areas outside the continental U.S.; prepayment is required (U.S. funds drawn on a U.S. bank). To purchase this publication contact:

ISU Extension Distribution
119 Printing and Publications Office
Ames, IA, 5011-3171
Telephone: (515) 294-5247 / Fax: (515) 294-2945
E-mail: pubdist@iastate.edu
Web site:
<http://www.extension.iastate.edu/pubs/Order.html>

Ohio Aquaculture Status Report (2002)

A status report of the Ohio Aquaculture Industry is now available at <http://southcenters.osu.edu/aqua/pub.htm>. The Ohio Cooperative Development Center, with assistance from the Aquaculture Program at the OSU South Centers, and the Ohio Aquaculture Association, conducted a mail survey to assess the aquaculture industry in Ohio. According to this study, Ohio's aquaculture industry is comprised of mostly small family operations across the state. The total annual net profit for the Ohio aquaculture industry is estimated at \$1,340,00. In addition to this

publication, various fact sheets, slide sets, as well as links to various aquaculture sites are listed.

Culture Series CD Availability

In an effort to better serve our industry, the NCRAC Publications Office has made available CD versions of both the Walleye Culture Manual and the Sunfish Culture Guide. The cost for either CD is \$15, which includes shipping and handling costs.

To purchase these CDs contact:

Iowa State University
NCRAC Publications Office
Department of Natural Resource Ecology and Management
253 Bessey
Ames, Iowa 50011-1021
Telephone: (515) 294-5280 / Fax: (515) 294-2995
E-mail: ncrac@iastate.edu

2004 American Heartland Aquaculture Conference

A 2-day conference is being planned by Illinois, Indiana, Kentucky and Missouri Aquaculture Associations for January 9 and 10, 2004 in Whittington, Illinois. This conference will include tours, presentations as well as networking opportunities with other aquaculturists. Registration will be either \$50 (membership in one of these four state associations) or \$65 (non-members); pre-registration deadline is December 19, 2003. For more details on this conference, contact one of the following: Dan Selock - Illinois (618-536-4451), Bob Lyons - Indiana (219-275-4775), Dan Bonk - Kentucky (270-382-3100) or Bart Hawcroft - Missouri (866-466-8283).

Talk To Us

NCRAC wants to hear from you. Tell us who you are and what you would like to see in the NCRAC Newsletter. If you are a new reader and want to be added to our mailing list, complete the form below and mail to:

NCRAC Newsletter
Attn: Joseph E. Morris,
Department of Natural Resource Ecology and Management
Iowa State University, 124 Science II
Ames, Iowa 50011-3221
Or forward information via e-mail: bartels@msu.edu or fax: (517) 353-7181

Ohio Aquaculture Import Regulations

Importers of Salmonidae to the State of Ohio will soon have to provide a more substantial health report than in past years. The following pathogens will have to be tested for in your health report:

1. Ceratomyxosis (*Ceratomyxa shasta*)
2. Infectious hematopoietic necrosis
3. Infectious pancreatic necrosis
4. Infectious salmon anemia
5. Proliferative kidney disease
6. Viral hemorrhagic septicemia
7. Whirling disease (*Myxobolus cerebralis*)

The tentative time table for expanded health report from importers are targeted for mid-2004 season. For more information, contact Ohio Department of Agriculture:
www.oda.agri.state.oh.us

MAA Membership Information

Memberships are very affordable and several options are available:

- Sustaining—Voting membership (one vote per membership) with National Aquaculture Association membership included. **Cost \$100** (this includes a gift of \$50 extra to help the MAA activities)
- Active—Voting membership (one vote per membership) with National Aquaculture Association membership included. **Cost \$50**
- Associate with NAA membership—Non Voting membership with National Aquaculture Association membership included. **Cost \$40**
- Associate without NAA membership—Non Voting membership without National Aquaculture Association membership. **Cost \$25**

We strongly encourage anyone interested in Michigan's aquaculture to become at least an Associate Member. It will help the MAA financially and enable us to continue our work in the future. Remember, all of your MAA officers and Board Members are volunteering their time and services to the industry.

Thank you for all who have supported the MAA in the past. If you are a new member, willing to help in some way, please contact any board member, we will welcome your participation.

From the Recipe Book

Orange Pepper Trout

4 Trout Fillet (approx. 6-8oz. size)
1 Orange or 1 Cup of Orange Juice
2 Tbsp Margarine (Butter is Best)
2 Tbsp Vegetable Oil
Black Pepper

Place trout into a hot skillet with Oil/Margarine skin side down. As the trout begin to fry, lightly coat the flesh with fresh squeezed orange. Then pepper the fillet moderately. When able to turn the fillet, just flip over to finish cooking. Approximately 10 or less minutes. Trout are done, when the meat flakes easily.

From the NET

Subject: Overworked

For a couple years I've been blaming it on lack of sleep, not enough sunshine, too much pressure from my job, earwax buildup, poor blood or anything else I could think of. But now I found out the real reason I'm tired is - because I'm overworked.

Here's why:

- a. The population of this country is 273 million.
- b. 140 million are retired.
- c. That leaves 133 million to do the work.
- d. There are 85 million in school, which leaves 48 million to do the work.
- e. Of this there are 29 million employed by the federal government, leaving 19 million to do the work.
- f. 2.8 million are in the armed forces preoccupied with killing the Taliban.
- g. Which leaves 16.2 million to do the work.
- h. Take from the total the 14.8 million people who work for state and city governments.
- i. And that leaves 1.4 million to do the work.
- j. At any given time there are 188,000 people in hospitals.
- k. Leaving 1,212,000 to do the work.
- l. Now, there are 1,211,998 people in prisons.

That leaves just two people to do the work.

You and me.

And there you aresitting on your butt, at your computer, reading jokes.

Nice., real nice!

Publication Information

The Newsletter is the official publication of the Michigan Aquaculture Association. For information or comments contact Dan Vogler at 231/389-2514, e-mail: dan@homesteadtrout.com

MAA Board Members:

President: Dan Vogler 231/389-2514

Vice President: Jerry Kahn 989/724-5241

Sec'ty/Treasurer: Steve Ouwinga 231/834-7720

Director: Rick Weidenhammer 231/548-5323

Director: Russ Allen 517/347-5537

Classified Ads

Stoney Creek Fisheries and Equipment, Inc. has a large inventory of aquaculture supplies and equipment in stock for next day shipment. We also have some used fiberglass tanks, incubators, hatching trays, etc. For a free catalog or to order call 1-800-448-3873

Harrietta Hills Trout Farm supplying the wholesale needs of the Michigan Trout Industry for many years. We continue to offer the highest quality hatchery products, fingerlings, stockers and marketready rainbow trout. For information or a price list call 231/389-2514

Accepting the Challenge... Zeigler Bros. offers a full line of high performance aquaculture feeds: starter to growout. Call us TOLL FREE to learn more (800-841-6800)

Contact Standish Milling Company for your aquaculture feed needs. Your local **Melick** feed distributor. Call Tom McCully at 231/377-6311

Advertising Info: Contact Dan Vogler at (231) 389-2514. Rates: \$15/ad, up to 40 words - additional words @ 35 cents per word.

MAA Newsletter - Articles, Notices, Advertising, etc. must be submitted no later than the 5th day of each calendar quarter for publication deadline. Publishing dates for 2004 are January 5, April 15, July 15, and October 15. Please submit documents in Word or WordPerfect formats. Published versions of this newsletter are available in PDF format. Contact Bob Baldwin at 231/796-2284 or rbaldwin@tucker-usa.com

MEMBERSHIP APPLICATION / RENEWAL

(Please Print and Check Appropriate Information Boxes)

New

Renewal

NAME: _____ SPOUSE'S NAME: _____

BUSINESS NAME: _____

ADDRESS: _____

CITY/TOWN: _____

STATE: _____ ZIP: _____

HOME PH:(____)____-____ BUSINESS PH:(____)____-____ FAX:(____)____-____

E-Mail: _____ Yes, I would like the e-mail version of any newsletters and updates from the association.

ANNUAL MEMBERSHIP RUNS FROM JANUARY 1ST THROUGH DECEMBER 31ST

Membership Options

_____ Sustaining (Voting - one vote per membership) w/National Aquaculture Assoc. Membership	\$100.00	_____
_____ Active (Voting - one vote per membership) w/National Aquaculture Assoc. Membership	\$50.00	_____
_____ Associate (Non-voting membership) w/National Aquaculture Assoc. Membership	\$40.00	_____
_____ Associate (Non-voting membership) w/o National Aquaculture Assoc. Membership	\$25.00	_____

Please make your check payable to: Michigan Aquaculture Association **Total \$** _____

(Check all that apply)

1. Are you a: Producer Broker Fee Fishing Operation Academic/Extension Personnel Consultant
 Feed/Equipment Supplier Other _____

2. What Species do you work with? _____

3. What species do you sell? _____

4. What species do you grow? _____

5. What are the top three challenges that you see facing your operation in the future?

1) _____

2) _____

3) _____

6. What are the top three challenges that are facing Michigan aquaculture as an industry today?

1) _____

2) _____

3) _____

7. What are the top three action items that your Association can assist you with?

1) _____

2) _____

3) _____

8. What can you contribute to your Association in terms of abilities, resources, expertise, etc?

1) _____

2) _____

3) _____

9. Are there aquaculture producers that you know who are not Members of the Association? Yes No

10. Any Comments or Suggestions: _____

Please Remit w/Dues To: MICHIGAN AQUACULTURE ASSOCIATION, C/O Stoney Creek Fisheries, 11073 Peach Ave., Grant, MI 49327

Steve Ouwinga

Michigan Aquaculture Association

c/o Stoney Creek Fisheries

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