

CIRCULAR 21
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REGULATIONS ON AQUACULTURE IN ARKANSAS

<p>This circular is issued in March, 2007, by the Arkansas State Plant Board. Other regulations issued by the Plant Board are covered in other circulars. Address correspondence to State Plant Board, P.O. Box 1069, Little Rock, AR 72203.</p>

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Section I. Standards for the Certification of Commercial Bait and Ornamental Fish

Approved and Issued by:

ARKANSAS STATE PLANT BOARD

Under Authority of:
Commercial Bait and Ornamental Fish Act (A.C.A. 2-5-201)

SECTION I. Official Standards for the Certification of Commercial Bait and Ornamental Fish in Arkansas

A. Purpose

To provide high quality, farm-raised bait and ornamental fish, free of certain diseases, undesirable plants, undesirable animals, and other contaminants deemed injurious to fish or fisheries.

B. Authority

The Arkansas State Plant Board, a division of the Arkansas Agriculture Department, under act 1449 of 2005, is the official certifying agent.

C. Certified Pathogens and Aquatic Nuisance Species (ANS)

Within the detection limits of the appropriate official testing protocol, commercial bait and ornamental fish meeting these standards are certified free of the pathogens, plants, animals and other contaminants listed here:

- a. Spring Viremia of Carp (SVCV)
- b. Infectious Pancreatic Necrosis (IPNV)
- c. Viral Hemorrhagic Septicemia (VHSV)
- d. Infectious Hematopoietic Necrosis (IHNV)
- e. Eurasian watermilfoil (*Myriophyllum spicatum*)
- f. Giant Salvinia (*Salvinia molesta*)
- g. Hydrilla (*Hydrilla verticillata*)
- h. Zebra mussel (*Dreissena polymorpha*)
- i. New Zealand mud snails (*Potamopyrgus antipodarum*)
- j. Red-rimmed melania (*Melanoides tuberculata*)
- k. Sticklebacks (Family Gasterosteidae)
- l. Rudd (*Scardinius erythrophthalmus*)
- m. Orfe (*Leuciscus idus*)
- n. Silver carp (*Hypophthalmichthys molitrix*)
- o. Bighead carp (*Hypophthalmichthys nobilis*)
- p. Snakehead fish (Family *channidae*)
- q. Quagga Mussel (*Dreissena rostriformis bugensis*)

D. Controlled Species

Commercial bait and ornamental fish meeting program standards are certified to be

produced using Arkansas Plant Board approved best management practices that reduce the likelihood that the following species will be present in any shipment of certified fish.

- a. Mosquito fish (*Gambusia spp.*)

E. Definitions

APHIS: Acronym for the U.S. Department of Agriculture, Animal and Plant Health Inspection Service.

Certified Producer: A Fish Farmer approved under these standards to represent their fish as *Arkansas Certified*.

Fishery: A region of water used for commercial and/or sport fishing.

Fish Farm: A location and/or business entity established for the commercial culture of fish, under the continuous management of a fish farmer.

Fish Farmer: For the purpose of these standards, the holder of a valid *Fish Farmer (aquaculturist) Permit* issued by the Arkansas Game and Fish Commission.

F. Eligibility Requirements

To be designated as *Arkansas Certified*, bait and ornamental fish must:

- a. have been spawned, hatched, and reared in Arkansas on a fish farm,
- b. have been raised in accordance with the practices and procedures defined in these standards,
- c. have met all inspection and testing requirements defined in these standards,
- d. and, be accompanied by a valid Arkansas Agriculture Department certificate.

G. Fees

i. The annual fee to the Plant Board for Certification shall be one dollar per surface acre of all ponds used to produce certified fish.

ii. The fee to the Plant Board for additional ANS inspections required for farms failing annual inspections shall be one dollar per pond surface acre.

Note: Fees for veterinary supervision of disease sample collection and lab fees for disease testing are not included in the Plant Board fees and must be negotiated between the farm and the service providers.

H. Application for Participation

Farmers wishing to have their fish certified under these guidelines must make application on official Plant Board forms.

I. Cultural Practices and Business Procedures

As part of the application process, farmers (the individual holding the Arkansas Game and Fish Commission *Fish Farmer Permit*) must sign an affidavit agreeing to strictly adhere to the following cultural practices and business procedures:

- a. Will culture only those species listed on the Arkansas Game and Fish Commission *Approved Aquaculture Species List* or by Arkansas Game and Fish Commission permit. .
- b. Use only water from wells or recycled water from within the farm proper without mixture with outside waters or contact with non-certified fish. Surface waters from any uncertified area of the farm may not be recycled to any certified area of the farm.
- c. No fish will be stocked into any pond used for the production of certified fish unless they come from a source certified under these guidelines. In special circumstances, such as the availability of new species or breeds, and under strict control with reliable documentation, fish farmers may request exemption from this subparagraph and the Plant Board will respond to the request within 10 working days.
- d. If only a portion of a participating farm is to be certified, it must be separated from the uncertified portion according to a biosecurity plan approved by the Plant Board. The uncertified portion must not be used to produce any fish species also sold by the farm as certified.
- e. If the farm produces other fish species as sportfish, foodfish, or for other non-bait and ornamental purposes, those fish must be kept separate according to an approved biosecurity plan (H.d. above). Alternatively documentation of biosecure separation is not required if these other species are raised according to these Official Standards for bait and ornamental fish including ANS inspections and the submission of 150 of these fish twice a year for fish health inspection (for a total of 300 fish twice per year).
- f. There will be no production or participation in the commerce of any salmonids species or any of the non-fish aquatic nuisance species listed in paragraph C. *Pathogenic and Aquatic Nuisance Species*.
- g. Silver carp and bighead carp may not be stocked into bait or ornamental fish production ponds.
- h. Certified fish may only be loaded on trucks into dry or disinfected tanks using water from the certified producer's fish farm. Trucks carrying uncertified fish may enter the loading area of a certified farm, but any tanks containing fish or water from an uncertified source must remain closed while loading or unloading certified fish.
- i. If any fish or water from an uncertified source are to be unloaded into the holding facility of a certified farm, the water and fish must be separated from certified fish according to a biosecurity plan approved by the Plant Board.
- j. No individuals, trucks, or equipment including boots, nets, and buckets

may enter any area that has contact with or drains into any water used by the farm for certified fish production if those individuals, trucks, or equipment have had contact with fish or water not included in the Arkansas Certification program or from wild fisheries. Such individuals, trucks, or equipment that have been disinfected just prior to entrance may enter these areas.

- k. Farms will produce Certified fish according to Arkansas Plant Board approved best management practices for controlled species (Section D).

J. Inspections

The Director of the State Plant Board or his agent may conduct investigations and/or make inspections as necessary to assure conformity with these standards. In particular, at least annually, the Plant Board shall make an on farm inspection of water sources, ponds, fish handling areas, equipment, compliance with best management practices, and records of fish sales and purchases.

As part of this annual inspection, an inspector from the Plant Board will visit the farm once per year during the summer. A visual check of 50% of the total number of ponds on the farm will be made for snail species, zebra mussels and specific aquatic plants. All of the ponds must be inspected at least once every 2 years. One pond edge will be examined for listed plants and snails and a hard surface (e.g., pier, post, drainpipe, aerator float) will be checked for zebra mussels. Any suspect plants or mollusks will be collected and submitted to an expert for confirmation. For fish species, visual inspection of farm holding vats will be conducted to insure that certified fish species being held in vats do not contain the listed ANS. Farm records will be examined for evidence of commerce in listed species.

In addition to Plant Board inspections, as part of the bi-annual sampling of fish for disease testing, the independent agent sampling fish will make note of the observance of any listed aquatic nuisance species. The Agent will preserve any unidentified fish species taken as a part of normal sampling procedures and submit those specimens along with disease testing samples to an independent APHIS approved laboratory for identification.

Farms that do not pass these ANS inspections may not label or represent their fish as certified until all aquatic nuisance species have been eradicated and confirmed by a successful inspection. In addition, in order to maintain their certified status, these farms will undergo an additional aquatic nuisance species inspection one month after the first successful post eradication inspection. This follow up inspection will not be conducted during a period when the aquatic nuisance species would not be expected to be present, but will occur when conditions for detection are favorable. Farms that do not pass a BMP inspection may not label or represent their fish as certified until the deficiency is corrected and the farm passes a follow-up BMP compliance inspection.

K. Disease Testing

Each year, the certified producer or new applicants, must provide documentation of two consecutive years of freedom from certified pathogens from an independent laboratory approved by APHIS to test for the listed pathogens. Sampling, analysis and reporting is to be conducted as follows:

The sample must be 150 fish and must include moribund (sick) fish observed during the sampling process. It must be collected twice per year. Once during the months of October, November or December and once during the months of March, April or May.

Collection of the sample must be overseen by an APHIS accredited DVM. The collection must be made under the direct observation of the overseer to an extent that the official can attest to the origin of the fish and that the sampling scheme was appropriate to meet the standards detailed below.

The sample should include all of the ponds and grow out tanks and the final species and age composition of the sample should reflect the overall composition of the certified fish on the farm. For example, if the farm has 5 ponds of koi and 10 ponds of goldfish to be certified, the final sample of 150 fish should be from all of the ponds and should be 33 % koi and 67 % goldfish with each pond of fish equally represented. For a 150 fish sample, you would need 50 koi (10 from each of the 5 ponds), and 100 goldfish (about 10 from each of the 10 ponds). For farms with more than 50 ponds, all species and sizes of fish must be included in each sample, but the ponds may be sampled in rotation so that all ponds are sampled at least once every two years. It is not appropriate to sample fish from shipping and sorting facilities where fish are held for brief periods. The origin of these fish cannot be known with certainty and they may represent only a very low percentage of the fish lots present on the farm. Small numbers of some species may be efficiently captured with a dip net along the pond margin; other species may have to be captured with a small seine. In some cases, fish traps are appropriate. They may be placed in the ponds by the farmer but the sampling official must be present to oversee the checking of the traps and the removal of fish from the traps for the sample. Fish collected and removed from the ponds by the farmer without direct supervision by the overseer are not appropriate. Be sure to include any moribund fish that are observed during the sampling.

Farms testing positive for a listed certified pathogen may not label or represent their fish as certified until they have undergone a Plant Board supervised eradication, disinfection, re-establishment with fish from a certified source and have then re-established a 2-year history of disease free inspections according to the rules of this program. All Plant Board fees must be paid during the re-establishment period.

L. Certificates and Labeling

Producers accepted into the certification program will be issued official certificates, which are to be completed at the time the fish are loaded. Certificates are valid until the fish leave the certified producer's control. All certificates will bear the shipment date and shipper invoice number along with description of the shipment. All will expire within 2 weeks of issuance.

a. Transference of Certification

A certified producer may purchase fish from another certified producer then deliver those fish under their own certificate given that they receive a valid certificate from the seller and maintain that certificate in their records for inspection by the Plant Board.

ADDENDUM

BEST MANAGEMENT PRACTICES

Baitfish Best Management Practices: Gambusia

Pond Preparation

- Ponds are drained and dried between crops
- Any puddles or sumps that still contain water after the drying process are treated with a suitable pond bottom sterilant or piscicide

Pond Filling

- No surface water is used (an existing requirement of the Arkansas Certification Program)
- Water may be moved between ponds if the donor pond is known to be *Gambusia*-free or if the water is passed through a filter of sufficiently small porosity to remove *Gambusia* fry

Fry Production – *Fathead Minnows*

- No uncertified broodstock can be used (an existing requirement of the Certification Program)
- Broodstock must be inspected for *Gambusia*
- Broodstock cannot be used if *Gambusia* are present
- *Gambusia*-free broodstock can be hand selected from mixed fish populations

Fry Production – *Golden Shiners and Goldfish*

- No uncertified broodstock can be used (an existing requirement of the Certification Program)
- Broodstock must be inspected for *Gambusia*
- Broodstock cannot be used if *Gambusia* are present
- *Gambusia*-free broodstock can be hand selected from mixed fish populations

- When fish are hatched in tanks, eggs mats must be thoroughly disinfected by treatments with 50-100 ppm iodine or 500-1000 ppm formalin prior to hatch and fry transfer.

Biosecurity

- If seines, nets, fish haulers and other equipment are to be moved to baitfish production ponds from areas known or suspected to harbor *Gambusia*, the equipment must first be dried or treated with a suitable piscicide.