To Whom It May Concern:

Enclosed is the Triploid Grass Carp permit application, and related information. After carefully completing your application, please mail it to the permit coordinator along with a **check or money order** in the sum of \$15 plus **\$2 per fish requested**. For public water stocking the \$15 application fee is not required. In the event of permit denial, the \$15 application fee would not be refunded; however, the \$2 per fish charge would be refunded. (**NOTE: The \$2 per fish charge does not constitute purchase of the grass carp.** After you receive your permit, you must make separate arrangements to purchase the fish.)

At this time, Inland Fisheries recommends no more than 10 fish per acre. Formulas for determining the area of ponds and lakes are provided on the Application to Stock Triploid Grass Carp. Triploid grass carp must be purchased only from a Texas Fish Farmer who holds a valid Exotic Species Permit (list enclosed). With a permit, landowners may transport up to 30 triploid grass carp. Whenever more than 30 triploid grass carp are transported, sellers or their agents must deliver the fish, and a valid Exotic Species Transport Invoice must accompany the shipment. Fish Farmers are responsible for supplying a copy of the Exotic Species Transport Invoice to buyers. Both buyer and seller must retain a copy of the Exotic Species Transport invoice for a period of one year following the stocking date, or as long as the triploid grass carp are in the water, whichever is longer.

Grass carp travel with flowing water and will swim out of your water body in the event of an overflow. In order to ensure that grass carp stay in your water body, a barrier across the spillway or overflow pipe is recommended. If fish escaping from your water body can possibly reach public water, an escapement barrier is required. This barrier (if required) must meet minimum standards (see enclosed Texas Parks and Wildlife Department Triploid Grass Carp Information Sheet).

In order to expedite the permitting process, please make sure that 1) the telephone number on the application is a number at which you can be reached during business hours, 2) the county where the pond or lake is located is included and correct, and 3) a map or detailed directions to the water body are attached. Processing of an application takes <u>at least four weeks</u> from the date the completed application is received in this office. **Incomplete applications will be returned.**

If you have any questions or need further assistance, please call Kristi Glenewinkel, the permit coordinator at (1/800/792-1112), when you hear the recording select 4 then 4 or (512/389-4444).

Thank you, Inland Fisheries Staff



Triploid Grass Carp Information Sheet Texas Parks and Wildlife Department - Inland Fisheries Division

Introduction

The grass carp, also known as white amur, is a vegetarian fish native to the Amur River in Asia. The U. S. Fish and Wildlife Service introduced grass carp into the United States in 1963 for experimental purposes. Because this fish feeds on aquatic plants, it can be an effective biological tool for control of nuisance vegetation. Since 1992, Texas has allowed stocking of triploid grass carp, a sterile form of the species, with a permit from the Texas Parks and Wildlife Department (TPWD).

Facts

Triploid grass carp:

- offer a biological alternative for aquatic plant control.
- are sterile and will not reproduce.
- are only distantly related to the undesirable European carp, and share few of its habits.
- live for at least 10 years and probably longer in Texas waters.
- grow rapidly and may exceed 60 pounds.
- feed only on plants, not on fish eggs or young fishes.
- feed from the top of the plant downward; however, where all submersed vegetation has been eliminated, the water can become turbid, as hungry fish eat the organic material out of the sediments.
- have definite food preferences. Plants like water lilies, filamentous algae (pond scum or moss), muskgrass and Eurasian milfoil are not preferred. Bushy and American pondweeds and hydrilla are preferred foods.
- are not effective for control of bulrush, filamentous algae (pond scum or moss), water primrose, coontail, Eurasian milfoil, or cattails.
- go dormant during the winter and resume intensive feeding when water temperatures reach 68° F.
- are difficult to catch with conventional fishing methods.

Stocking Considerations

- Triploid grass carp are inexpensive compared to most other aquatic vegetation control methods.
- Depending on plant types, plant density, and stocking rate, it may take several years to achieve control using triploid grass carp. Restocking, generally every 5 to 7 years, is needed for maximum effectiveness.
- The types of plants triploid grass carp prefer may also be important for fish habitat and waterfowl food. Aquatic vegetation can be important in maintaining good fish communities and providing food for other wildlife species.
- If the water body is overstocked, all submersed aquatic plants may be eliminated. Removing excess fish can be difficult.
- If insufficient numbers of triploid grass carp are stocked, less-favored plants may become overabundant.
- Stocking triploid grass carp may result in alga blooms and reduced water clarity.

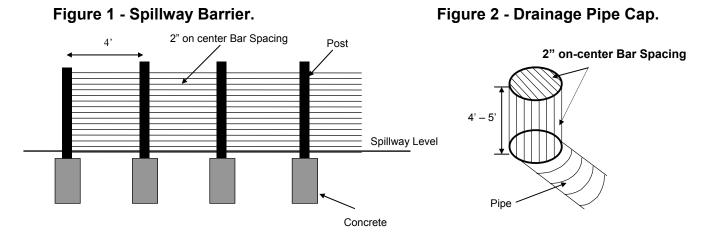
Emigration Barrier

Triploid grass carp readily seek flowing water and often escape before controlling nuisance aquatic plants. Escapement of the stocked fish can reduce or eliminate their potential for plant control within targeted areas, and can threaten beneficial plants outside of targeted areas. <u>Impoundments on permanently flowing creeks, or those</u> that overflow frequently, should not be stocked with triploid grass carp unless they can be effectively screened. Therefore, emigration barriers are required for many, and recommended for most, water bodies being stocked with triploid grass carp. In cases where emigration cannot be prevented, chemical or mechanical control of aquatic plants is recommended.

With few exceptions, the best screening device for nearly all outlet types is the horizontal parallel steel-bar design. The orientation of the bars allows unrestricted passage of small debris, thereby minimizing maintenance, clogging, and flooding concerns. Bar thickness of ¼- to ½- inch is preferred. Round bar stock will facilitate debris passage. For a spillway barrier (Figure 1), the horizontal bars are attached to vertical support posts (minimum ¾-inch diameter) spaced 4 feet apart. Horizontal bars should be spaced 2 inches apart. The barrier should span the entire spillway. Since triploid grass carp are excellent jumpers, barrier height should extend 2 feet above the normal high water level.

For capping a drainage pipe (Figure 2), a similar bar design should be used. Extending the bars 4-5 feet above the overflow pipe allows water to rise over debris and begin flowing again should the screen become clogged.

Welded wire and chicken wire are not effective as barrier materials. These types of materials readily clog with debris and the force of even a small amount of water can destroy the barrier. Clogged barriers may threaten the integrity of dams.



Permits

Before stocking, water body owners, their agents, or controlling authorities must obtain a Triploid Grass Carp Permit from the Inland Fisheries Division of the TPWD. Permit applications and additional information on triploid grass carp can be obtained by calling (1/800/792-1112 /ext. 44) or (512/389-4444), or via the TPWD Internet web site at http://www.tpwd.state.tx.us/grasscarp. Once the application has been received, it will be reviewed by a District Fisheries Management Biologist. In some cases, a TPWD staff member will contact you or make an on-site visit to ensure the fish will not escape into public waters. Allow 4-5 weeks for the entire permit process. <u>Stocking of triploid grass carp is not allowed in some environmentally sensitive areas where threatened, endangered, or unique species occur.</u>

After you receive an approved permit, triploid grass carp **must** be purchased from a commercial fish farmer who holds an Exotic Species Permit authorizing possession of triploid grass carp. A list of permitted fish farmers will be provided with your approved permit.

Many have asked, "Since triploid grass carp are sterile, why is a permit required? Why be concerned with escapement into public water?" These fish are permitted so that TPWD can keep track of the location and number of grass carp in the environment, especially near sensitive areas. We are concerned about escapement because, although triploid grass carp can't reproduce, they can live for years, potentially migrate to sensitive areas, and consume a great deal of vegetation. Texas' outstanding freshwater fisheries are heavily dependent on natural aquatic vegetation. Aquatic plants provide the following benefits:

- cover for young fish to hide from predators
- food and cover for many insects that fish eat
- protection from currents and silt for fish eggs in nests
- structure that sportfish use for shade and camouflage, which in turn helps anglers locate them.

Ensuring that triploid grass carp remain where they are stocked makes economic sense for the water body owner and helps protect beneficial aquatic vegetation in our public waters.

Stocking Facts

- Triploid grass carp should be 10-12 inches long when stocked. Smaller carp are likely to be eaten by other fish.
- To enhance effectiveness of triploid grass carp, overabundant vegetation should first be reduced by winter dieoff, herbicide treatment, or water-level drawdown to promote grazing on re-growth. Early spring is a good time to stock.
- The recommended stocking rate for triploid grass carp is five per acre if the water body has 50% or less plant coverage, and 10 per acre if plant coverage is greater than 50%. If warranted, the stocking rate can be increased with consent of your local TPWD fisheries management biologist.
- If you need additional fish, it will be necessary to apply for a **new** permit. A request can be made by calling (1/800/792-1112 /ext. 44) or (512/389-4444).

Additional Grass Carp and Aquatic Plant Information Via the Internet:

For more information about the Texas Parks and Wildlife Department Triploid Grass Carp Program, grass carp biology, or aquatic plants, visit the Texas Parks and Wildlife Department web page at http://www.tpwd.state.tx.us/landwater/water/environconcerns/nuisance_plants. Links to other resources are also provided.

COUNTIES OF SPECIAL CONCERN

A wide variety of habitat types exist in the state of Texas. Many species within the state depend heavily (or exclusively) on fragile habitat, which is susceptible to alteration either by humans or by the introduction of non-native species. In order to protect Texas' valuable natural resources, introductions in areas harboring threatened, endangered and unique species, as well as coastal areas with irreplaceable marsh habitat could be affected. As a result, applications for triploid grass carp permits received from the following counties <u>will be given</u> <u>special consideration and there is an increased risk of permit denial:</u>

Aransas Brazoria Brewster Caldwell Calhoun Cameron Chambers Comal Crane Crockett Culberson Galveston Gonzales Harris Hays Jackson Jeff Davis Jefferson Kenedy Kleberg Loving Matagorda Menard

Nueces Orange Pecos Presidio Reeves Refugio San Patricio Terrell Val Verde Victoria Ward Willacy



Triploid Grass Carp Vendor List

The following aquaculture facilities have been permitted, as of December 31, 2008, by the Texas Parks and Wildlife Department to sell Triploid Grass Carp to permitted private landowners.

Harrell Arms Arm's Bait Co. & Fish Farm 2020 FM 1476 Dublin, TX 76446 (254) 879-2797 or (800) 259-2248

Roger Coffman Mr. Fish 10711 Hwy 31 South Lonoke, AR 72046 (501) 676-2425 <u>mrfish2425@aol.com</u>

Terry Cox Double T Enterprises P.O. Box 42 Seminole, TX 79360 (432) 553-4925

Paul Dorsett Total Lake Management 9250 FM 2549 Bryan, TX 77808 (979) 279-2946 www.totallakeman.com

Jack Dunn Dunn's Fish Farms of Arkansas P.O. Box 85 Fittstown, OK 74842 (800) 433-2950

Charlie Havens Eatex 12505 Wild Onion Rd. Ore City, TX 75683 (903) 968-6401

Kerry Havins Maud Bait & Tackle 722 Broadway Maud, TX 75567 (903) 585-5464 rhavins39@aol.com

Kenneth Henneke Henneke Land Development, Inc. 1267 CR 134 Hallettsville, TX 77964 (361) 798-5934

John Herrmann Herrmann Fish Farm 4977 CR 83 Robstown, TX 78380 (361) 387-7819 Brenda & Stanley Higginbotham Hays Bait Distributors 14020 Camp Joy Rd. Ore City, TX 75683 (903) 968-4938 www.haysbait@aol.com

Malcolm C. Johnson Johnson Lake Management San Marcos, TX 78666 (512) 396-1231

John Jones Lochow Ranch Services 4700 CR 342 Milano, TX 76556 (866) 422-9022 or (512) 455-9551 www.lochowranch.com

James McIntyre Lake Pro, Inc. P.O. Box 9 Katy, TX 77493 (281) 391-3688 lakepro@houston.rr.com

Brad Metzler Pond King, Inc. 5924 W. Hwy 82 Gainesville, TX 76240 (940) 668-2573

Larry Odom Koi Ranch Rt. 11, Box 44 Jacksonville, TX 75766 (903) 586-1610

Charles Orms Charles Fish, Bait & Tackle Rt. 2, 720 CR 447 Eastland, TX 76448 (254) 653-2543

Todd Overton Overton Fisheries, Inc. 19367 IH 45 S. Buffalo, TX 75831 (903) 322-2626 www.overtonfisheries.com

Mike Robinson Brenham Fisheries 6257 Hwy 36 N Brenham, TX 77833 (979) 836-5471 G.W. Roland, Jr. Dub Roland Farm Pond Management 2869 Roland Road Whitesboro, TX 76273 (903) 564-3812

Vance Schultze Tank Hollow Fisheries 200 W. Tank Hollow Rd. Poteet, TX 78065 (830) 742-4148

Larry Charles Smith The Bait Barn 2704 Hwy 21 East Bryan, TX 77803 (979) 778-3056

Brad Vollmar Vollmar Pond & Lake Management 408 Leland Street Kerrville, TX 78028 830-992-0928 lakemanagement@gmail.com

Bob Waldrop Tyler Fish Farm, Inc. 3096 CR 4923 Ben Wheeler, TX 75754 (903) 849-2081

William Wingo Magnolia Fisheries, Inc. P.O. Box 3087 Coppell, TX 75019 (972) 724-0071

Kenneth Zwahr Danbury Fish Farms, Inc. P.O. Box 528 Danbury, TX 77534 (979) 922-8414

Updated 6/23/09