

THE MAINE STATE AQUARIST SOCIETY'S NATIVE SPECIES AWARENESS PROJECT

by Daniel P. Dumas, President, MSAS, North Waterboro, Maine

About two and a half years ago, while working with the idea of establishing an aquarium society in Maine, I came across some laws that could have hindered future club activities. One law states that any fish which can survive the year 'round above 32° latitude (the top of Florida) is not allowed to be housed, or even brought into Maine. Other laws, when mixed together and read between the lines, imply that it is illegal to collect and house Maine natives. So much for native hobbyists. Of course the word "aquarium," or any word even remotely related, cannot be found in any of the state laws or statutes.

I made up my mind to become a "legal" native-fish hobbyist. It just didn't seem right that the state could have so much control over the public as to say what types of fish (nature) I could enjoy in my home. An avid fisherman since childhood, and a convert from tropicals to natives, I felt that these laws could affect my involvement with this hobby directly. After many hours of research, many, many phone calls, a lot of letter-writing, and many months of waiting, I was given permits from the state to collect and house Maine natives.

Today the Maine State Aquarist Society (MSAS) is a strong, prospering club, with a dedicated membership. We are all excited and proud to be implementing the Native Species Awareness Project (NSAP) with the state's permission and approval.

The idea or need for this project first came to mind while I was out fishing one morning. I noticed some teenagers down the bank from me catching Pumpkinseeds and discarding them along the bank to die in the sun. After the boys packed up and started leaving without their day's catch, I butted in. I just had to say something! I explained to them the effects their actions would have on life as we know it. I gave them a good verbal lesson in fishing and environmental ethics. They now stand corrected! If we could instill a sense of pride and caring for our native fish at an early age, children would carry it with them through their lives, benefiting us all.

About a month later, I heard a story about a tourist-attracting trout stream. Nothing unusual? People were taking their whole families on picnics to feed the fish. Not trout. Koi. It seems a population of Koi somehow mixed in with the native trout. It is getting harder and harder to catch the trout, but they say that the Koi really like pieces of bread.

I realized that with all the "Save the 's" out there--whales, snails, rain forests, owls, etc.--we may be forgetting our own backyards. This was the basis for our project. To think globally, but act locally. We knew that we couldn't bring people

out to a pond, but we could get a few people to bring the ponds, rivers, and streams back to the others. What better way than with aquariums? Windows to the underwater worlds. Every aquarium holds an infinite number of questions just waiting to be asked. People nowadays need to see for themselves. What better way? But remember those laws.

I started by contacting NANFA, specifically Bruce Gebhardt. Bruce and NANFA proved very helpful. I received a survey done by Konrad Schmidt several years ago concerning states' collecting rules and regulations. From this survey, I was able to seek info from states I knew were collector-friendly. Kansas Fish & Wildlife needs to be thanked and commended for their help, and their willingness to work with native hobbyists.

I developed a four-page outline for this project. Included were everything from the start of the MSAS to future possibilities and benefits for the project. At the end I attached a letter from Bruce (whose articles were appearing in AQUARIUM FISH Magazine) expressing his views on regulation of native-fish enthusiasts. You should all know its contents. Every paragraph of the outline and Bruce's letter was read out loud to the state officials at our meeting. With the help of our Vice-President, Steve Beckwith, every word, line, paragraph, idea, and opinion was explained in fullest detail. We made certain we were understood and taken seriously. When the agency officials saw us walk into the meeting, each with an armful of books, magazines, newspaper articles, etc., they had no idea what they were in for. Our meeting, which they probably thought would be a simple 20 minutes, turned out to be almost three hours. Although there were some uncomfortable discussions for both sides, we ended the meeting positively, and with a good understanding of each other. Fred Hurley and Peter Bourque of the Maine Department of Fish & Wildlife earned our thanks and respect for honestly sitting down and talking this project out.

Today I hold blank permits for collecting and transporting of Maine natives. Club members will receive them only after completing a few requirements set by the executive board of MSAS. We want our native hobbyists to prove that they are worthy of holding these permits, which will be sent to the state for approval under MSAS letterhead. If any permit-holder is disrespectful of this privilege, it will fall back on the whole project. After all our time, energy, and hard work, we will not allow just anyone into this project.

I hope you do not think we are being too "governmental." These permits are for Maine fish only. We still can't bring any natives into Maine. You can see why we are being careful. We look forward to working with the state in the future.

One requirement, the most difficult, is to pass an exam on natives. This test consists of fifty questions. Member will be

allowed to take it home and complete it at their leisure. We allow no more than six wrong. We hope this makes members read and learn a little about natives. They can find the answers any way they choose. I've enclosed the exam so that readers of AC can see how they would do. You would see that we are not being too harsh.

We are also requiring members to keep records of all collecting trips by recording such things as: species sought, location, topography, weather conditions, pH, hardness, temperature, date and time, collecting method, other species encountered, visible diseases, defects, mutations or hybrids, etc. We will provide members with easy-to-fill-out forms. Members will have to submit reports on the husbandry of their collected fishes. The NSAP will, as a whole, submit a report to the state outlining our activities and findings.

Although there is still a lot I would like to discuss, I will leave that for future articles and updates. Again, I want to thank everyone who has helped us so far. Anyone who has questions or comments can feel free to call me.

--Daniel P. Dumas  
Pres., MSAS  
4 North Circle  
N. Waterboro, ME 04061  
207-247-4757

**WRITTEN EXAM**

STATE OF MAINE (WARM WATER SPECIES) COLLECTING AND HOLDING PERMIT.  
(Upon scoring 85% or higher, this test, will be submitted to: The State  
Maine Department of Inland Fisheries And Wildlife. The issuing of this permit  
is subject to the Departments approval.)

1. What is a seine ? \_\_\_\_\_  
a. boat b. gill net c. weighted net d. none of the above
2. What is a spawn ? \_\_\_\_\_  
a. parasites b. eggs c. bed d. livefood
3. What native fish is legal to keep alive without a "special" permit in the  
state of Maine?  
a. pickerel b. sunfish c. shiner d. none
4. How many fish of the same species are allowed per location under a  
"special permit"?  
a. 4 b. 6 c. 8 d. To be determined by State on permit
5. What body of water can you release a fish in, once you have removed it  
from it's place of birth?  
a. anywhere b. where caught c. rivers or lakes d. none
6. With what other species would you keep sunfish?  
a. Convicts b. Oscars c. Guppies d. Maine Natives
7. What must you do with a native fish you have taken from a lake with a  
"special permit" when you must get rid of him.  
a. give him away b. release it unharmed c. destroy it d. sell it
8. What native fish collected with a permit may be sold to other hobbyists?  
a. bass b. sunfish c. perch d. none
9. What pH should you keep wild caught natives in?  
a. 6.0 b. neutral c. 8.4 d. similar to where acquired
10. Fish that come from small marshes or ponds need what for filtration?  
a. none b. adequate c. sponge filters d. power filters
11. What is a "special permit" holder required to do with the species  
collected?  
a. stock farm ponds b. sell as bait c. file reports d. give away
12. What size aquarium should be used for six adult sunfish?  
a. 20 gallon b. 55 gallon c. 10 gallon d. 125 gallon
13. What would be the smallest size aquarium, for an adult pair of sunfish?  
a. 40 gallon b. 55 gallon c. 10 gallon d. 125 gallon
14. If captive spawning is achieved what can you do with the F-1 fry?  
a. stock ponds locally b. give to other permit holders  
c. call the State Fisheries & Wildlife Dept. d. sell them
15. If approached by a warden when using capturing equipment, you should?  
a. run b. remain calm and show I.D. & permit c. lay down d. wave arms
16. Where should you catch your native fish?  
a. at public beaches b. city parks c. remote areas d. near swimmers
17. What should you wear while collecting native species?  
a. Polaroid glasses b. sunscreen c. waders d. any of above
18. On hot sunny days what is highly recommended for fish transportation?  
a. holding basket b. aeration c. insulated cooler d. all of the above
19. What is the minimum weekly water change requirement for holding native  
species with adequate filtration?  
a. 50% b. 5% c. 10% d. 25%
20. What is the Purpose of the Maine State Aquarium Society, per it's  
constitution?  
Written Answer:
21. If you find out that a particular fish you are looking to collect is in  
spawning season, you would:  
a. Be careful not to collect in an area you know their spawning.  
b. Avoid collecting that species at that time altogether.  
c. Wait until spring. d. Collect males only.

22. Brook Trout (*Salvelinus fontinalis*), is a fish that dwells:
  - a. Near marshlands.
  - b. In cold clear, mostly inland waters.
  - c. In very large lakes
  - d. all of the above
23. If when collecting a certain species of fish, you check the pH of the body of water you found it in and the pH value is very low, you would:
  - a. Alter the pH of the water in its aquarium to neutral as soon as possible.
  - b. Match the pH in your tank, to that of the water the fish was found in.
  - c. Do nothing, temperature is more important than anything.
  - d. Check in field guide for proper pH requirements of that particular fish, and adjust pH accordingly in the tank.
24. One day as you are collecting fish, you pull a few fish out of your net that may have some possible signs of disease. You would:
  - a. Throw just those that look sick back, and collect the rest.
  - b. take all of them home and treat them for disease in your aquarium.
  - c. Take only the healthy ones home, but keep them in a n isolation tank, until you know they are well, and possibly notify the Fisheries & Wildlife Dept..
  - d. Treat the entire body of water the fish are in for disease.
25. When collecting fish you should be as kind as possible to the animals, as they are in a somewhat stressed condition. What are some of the rules to follow:
  - a. Keep them covered and in a shaded place.
  - b. Don't overcrowd them in your buckets.
  - c. Get them home as soon as possible.
  - d. All of the above.
26. How do you go about feeding wild caught native fishes?
  - a. Individual species have specific dietary requirements, you should find out what they are, and feed accordingly.
  - b. Make sure you feed live food, because most native fishes eat other small fish.
  - c. Feed Aquarian brand food only.
  - d. Feed every few days, that which is found in original habitat.
27. What is Anadromous?
  - a. Fish that live in the ocean.
  - b. Fish that live in lakes.
  - c. Fish that live in the seas, and then migrate to freshwater to breed.
  - d. Fish that live in freshwater, then migrate to the sea to breed.
28. This collecting tool is not suited for use in rocky areas, or areas with sunken snags.
  - a. Gill Net
  - b. Seine
  - c. Minnow trap
  - d. None of the above
29. A good bait to use for trapping sunfish is?
  - a. Frito's Corn Chips
  - b. Chicken liver
  - c. Bread
  - D. All of the above
30. A stream "V" trap will most likely be made from?
  - a. Plexiglass
  - b. Fiberglass
  - c. Rocks
  - d. Rabbit wire
31. A minnow trap should be placed near?
  - a. Natural / man-made cover
  - b. Wide open areas
  - c. Strong currents
32. This fish will prove very difficult to collect with a minnow trap.
  - a. *Lepomis gibbosus*
  - b. *Fundulus diaphanus*
  - c. *Micropterus salmoides*
33. The best place to collect *Cottus bairdi* would be?
  - a. Deep areas of lakes
  - b. Rocky streams
  - c. Shallow ponds

34. This species is not a true species to Maine waters.  
a. Pomoxis b Ictalurus c. Catostomus d. Notropis
35. Although adults live in deep lakes, juveniles can be found in shallow streams. What species?  
a. Micropterus dolomieu b. Enneacanthus obesus c. Lota
36. A minnow trap baited with rotten chicken liver, left over night in a lake could possibly yield this species.  
a. Anguilla rostrata b. Ictalurus nebulosus c. Lepomis gibbosus  
d. All of the above
37. The best way to hold a native fish is?  
a. With a meat cutters glove b. Dry hands so you do not drop them  
c. Wet hands, but carefully
38. Native fish should not be...  
a. Kept below 65 deg. b. Kept above 65 deg.  
c. Fed prepared foods d. Kept with tropicals
39. Culaea inconstans should be housed...  
a. In bare tanks b. With aggressive species c. In dimly lit tanks  
d. None of the above
40. Which species grows at the slowest rate?  
a. Ictalurus nebulosus b. Lepomis gibbosus  
c. Micropterus salmoides d. Esox niger
41. The best collecting method for Esox niger is...  
a. Minnow trap b. Slurpgun c. seine d. Square box trap
42. The problem with using a hook to catch aquarium prospects...  
a. Tissue damage b. Stress c. Fatigue d. All of the above
43. These estuarine fish are one of the most hardiest and adaptable species.  
a. Perca flavens b. Rhinichthys atratulus  
c. Semotilus atromaculatus d. Fundulus heteroclitus
44. In order to spawn some native species it may be necessary to...  
a. Increase pH to about 8.7 - 9.0 b. Create seasonal temperatures  
c. to send electrical impulses through the water d. All of the above
45. These species are similar in that they live on live foods...  
a. Micropterus salmoides/Esox niger b. M. salmoides/Ictalurus nebulosus  
c. E. niger/Anguilla rostrata d. I. nebulosus/ A. rostrata
46. The best time to collect I. nebulosus is ...  
a. Early spring b. Late summer c. Early fall d. Late fall
47. Native fish do not...  
a. Contract diseases b Require constant temperatures  
c. Require a cycled tank d. None of the above
48. You may only collect natives in the county specified on your permits?  
True or False
49. Once a native species has been in your possession for 6 months you may keep it with tropicals that are of the same temperament.  
True or False
50. It would be best to collect sunfish near public beaches because they are attracted to swimmers.  
True or False

APPENDIX I, COPY OF LETTER FROM NANFA TO MAINE STATE AQUARIST SOCIETY

Bruce Gebhardt, Editor, Secretary, Board Member  
Past President  
NORTH AMERICAN NATIVE FISHES ASSOCIATION  
123 W. Mt. Airy Ave.  
Phila., PA 19119  
215-247-0384

August 18, 1993

Daniel P. Dumas  
Maine State Aquarium Society  
4 North Circle  
N. Waterboro, ME 04061

Dear Mr. Dumas:

Your request for multi-state information on state rules on collecting fish was a bit unusual. Fortunately, NANFA has a bank of information dating from a survey five or six years ago: Regulations on Collecting Fish in North America by Konrad Schmidt.

Collecting fish for study or aquarium use, especially non-game species, means collecting conventional bait fish or other small fish. This is covered under most state fishing licenses. Equipment and conditions are usually specified in any state's fishing regulations. Why is there controversy? The state should not be involved in setting up some elaborate procedure to monitor or regulate a normal right attendant upon purchase of a fishing license.

There is usually some vagueness at the periphery--are sunfish and catfish game fish? etc. Since it's unlikely that netting or trapping such half-game, half-trash fish would affect the population much, even in a particular lake, there's not much reason for regulatory action on collection of such species. Regulation of species that can be collected is unnecessary. At most, it should be limited to those that a state has, in its putative wisdom, chosen to pay for and propagate, and those which are thought to be in environmental danger.

Many states have special educational or scientific collecting permits for serious, impactful, or repeated uses of species that are deemed worthy of protection. These permits also may be required for use of potentially dangerous collecting methods, like electroshocking and poisoning.

I collect under such permits in a variety of states. Quite frankly, the reporting requirements in some states are so onerous that I am beginning to give the permits up. A report at the end of the year ought to be enough. It's excessive, intrusive, and expensive when you're supposed to report to wardens beforehand, as applies in some states. In

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my opinion, these elaborate programs for collecting permits are unwarranted, and only serve to inhibit research and public awareness of wildlife.

The right to collect most fish, aside from being covered by most fishing licenses, flows naturally from consideration of what a fishing license confers. After all, the license gives the right to take game fish expensively produced by the state, and, if you wish, tear off their fins and throw them on the road. If that's OK, would it not then also seem logical that someone who catches fish:

\*of no intrinsic, individual value to the state;

\*which cost the state nothing to produce;

\*whose individual removal can have no effect on overall populations and may in fact benefit the fish population in the same way that regular "harvesting" of game fish benefits their population

\*which will be kept alive, and indeed cared and catered for, so that their actuarial prospects are much better than their wild brethren; and,

\*(the other side of the foregoing), which will not be killed or allowed to die intentionally

should be free to go about his business?

An attempt to prevent collection of bait fish for study but not for bait would put the state in the position of sanctioning slaughter of non-game wildlife while opposing its live preservation, and environmental education.

Collection and maintenance of wild organisms has been a natural component of any naturalist's learning process. Acquaintance with the native fish of a state compels involvement, and understanding of the importance of environmental awareness. Maine is a state with a great tradition of appreciation of nature and natural beauty. Mainers and visitors should be allowed--and encouraged with a minimum of red tape--to be aware of all their wild heritage, including both game and non-game fish.

Sincerely,

Bruce Gebhardt