Recreational fishing is an important economic activity for many small farms in the Southeast. In these days of economic hard times for farming, small farm operators are looking for cost efficient alternatives to enhance farm profitability. Concurrently, the number of anglers in the United States, both rural and urban, is rapidly increasing, especially among the Hispanic and Asian populations. With today’s increasing consumption of fresh water aquaculture (to substitute for the dominance of poultry and the relatively high priced beef and pork) and the high fuel/energy costs, many anglers are looking for fishing opportunities closer to home. Fishing in private ponds or lakes could help fill a portion of this need and could provide a source of income to land owners. Fishing serves a dual purpose as it is done for both recreation and as a food source.

Fee Fishing

Fee fishing – paying someone for the right to fish and/or paying for any fish that are caught – is rapidly becoming popular among anglers seeking that recreational experience which also provides food for the table in a hunter-gatherer context, but with neither firearms nor much safety risk. There are three basic types of fee fisheries: long term leases, day leases, and fish-out operations. Exclusive fishing rights to a private pond or lake can be leased on a long term basis to an individual or group of individuals, such as is done with hunting leases. Management of the pond is often the responsibility of the lessee. Day leasing involves collecting a daily use fee from the fisherman. Pond management is the responsibility of the operator. Normally, only those fish produced within the pond through natural production are made available to the angler; however, the pond may be stocked on an occasional basis with catchable-size fish, such as channel catfish or large-mouth bass or rainbow trout. Generally, large mouth bass and bluegill ponds are day leased. “Fish-out,” “put and take,” or “pay by the pound” fisheries involve stocking a pond or lake with fish and then charging the angler for each fish that is caught by weight or per fish. Consequently, fish populations in this type of “pay lake” operation must be artificially maintained at high levels by regular or frequent stocking of catchable-size fish, usually catfish. Some operators of pay lakes collect a nominal access fee (from the strictly recreational angler who puts back each catch) as well as a per pound or per fish charge for fish taken from the premises.

Fee fishing is appealing to a wide variety of individuals, including those anglers who like to fish (either seriously or occasionally), but are limited by time or resources (such as owning a boat, single parent families, or the elderly). Fee fishing can be attractive to tourists or individuals that fish on an infrequent basis – in many states, no license is required to fish in a pay lake or fee fishing pond. Fee fishing operations could be incorporated into small farm operations to enhance profitability. Ponds are often present, but underutilized, especially in the more mountainous regions of Georgia, Tennessee, the Carolinas and the Virginias. Most small farms frequently have access to heavy earth moving equipment capable of constructing or improving existing ponds. Demand for farm-raised fish for these enterprises would also enhance the profitability of other food fish producing farms. Known fee fishing operations vary substantially in their financial success. Little is known as to why this variation occurs and what type of angler uses these pay lakes and fee fishing ponds.

This study examines the current users of these facilities, with the intent to help determine the potential for fee fishing as an alternative strategy for rural development, and to determine what characteristics are desirable for a successful operation. Specifically, surveys of pay lake operators (11) and their angler customers (423) were conducted the summer of 1999 to (a) profile this sector of the aquaculture industry and (b) determine its potential as a customer source for food and recreation.

Knowing who the customer is, what attracts them to a fee fishery, how to choose a good
location, and how to advertise most effectively will increase the likelihood of operating a successful fee fishery. Landowners who currently own lakes or have suitable sites for pond construction will be able to determine whether a fee fishing operation is feasible for them. Likewise, investors will be able to determine the quantity and location of land and capital investments needed to develop a fee fishing facility. If the fee fishing industry experiences a resurgence to the growth rate or popularity observed a decade ago, a larger market will develop for fish producers and live haulers. Furthermore, more individuals may turn to small farm aquaculture to produce fish needed for the fee fishing market. Considering the high demand for places to fish and the moderate capital investment required to integrate fee fishing into a small farm operation, fee fishing appears to be a viable alternative to enhance small farm profitability.

Methodology and Survey Design

Anglers were contacted on site and questioned by undergraduate agribusiness marketing student interviewers. The sites were selected from a directory of over 300 pay lakes and fee fisheries, as compiled by the Georgia Department of Agriculture. A reporting form (figure 1) was used to record their responses. Anglers were not led in their responses (with multiple choices to select a response), but freely responded to the questions using their own words.

Angler Demographics

Anglers interviewed ranged in age from 15 to 91. The overall mean age of those interviewed was 49 years. Nationwide, fishermen age 25 to 44 were 49% of the total fishermen. In this study, only about 15% of the anglers interviewed were age 61 or older, even though the Southeastern U.S. has the highest concentration of elderly and retired people in both metro and non-metro areas, due partly to migration from the rust belt to the sun belt, and the recent shift from the deep south of “halfbacks” into the southern mountain regions – half way back to their original state of residence.

The majority of fishermen interviewed were males (80% of the total). Nationwide, men comprise 68% of all fishermen. The subjects of the interviews were primarily Caucasian (75%), followed by Hispanic (10%), African American (8%), and Asian (6%). Nationwide, of all licensed fishermen age 16 and older, 92% were Caucasian in 1998.

Anglers were asked how many miles they had driven in order to reach the fee fishing operation. The urban/suburban fee fishing locations that were sampled had corresponding low average numbers of miles driven by their customers – 80% of their customers drove 20 miles or less (average of 12 miles). None of the frequent fishermen interviewed at these metro area sites drove more than 30 miles, while rural residents commonly drive farther on a daily basis to meet family needs. Ironically, the average commute in Georgia from home to work exceeds 30 miles.

For all fishermen interviewed, the top employment category response was unemployed - retired - disabled (20%), followed by skilled/technician (16%), laborer (14%), and sales (10%). Professional, military, clerical, management, medical, and student were the remaining employment categories; together they totaled 40% of the sample.

The size of the fishing party ranged from 1 to 15, with the average number in a fishing party for all locations surveyed being 3.5, with no significant difference between rural and urban sites. Fee fishing appears to be a social activity, with only about 5% of the fishing parties interviewed being comprised of one individual.

The survey data suggests that fee fishing is very popular with family groups, including extended families (multiple generations). Fewer than 10% of those interviewed were not fishing with their family or in a group of family and friends. Most fishermen (nearly 80%) were married.

Fishing Interests

The most common method by which customers found out about a fee fishing operation was by word-of-mouth (45%), followed by seeing a sign (35%), and 10% saw an advertisement in the newspaper. It is a definite advantage for a fee fishery to have been around a while so the customers can get to know the operation and its owners. Having a good relationship between the management and the customers is important to ensure that people will refer others to the operation. An attractive sign that is visible to potential customers is also a good investment.
Figure 1. Angler Questionnaire.

Location ___________________________ Date ____________________________ Time AM 6 7 8 9 10 11
                                                PM 12 1 2 3 4 5 6 7 8 9 Close
Age ________    Marriage Status ____________    City of Residence ________________________________
Sex ________    Number in Party ____________    Distance Traveled ___________________________ Miles
Race ________    Family Unit Yes No    State Fishing License Yes No

What do you do for a living? ______________________________

Why did you come here instead of a public fishing area? ______________________________

Have you been to a fee fishery before? Yes No Is this your first visit to this site? Yes No

If so, do you think you will be back? Yes No

How did you find out about this fishery?

magazine sign paper flyer

directory radio word-of-mouth

How often do you visit a fee fishing operation? ______________________________

What other types of fishing do you do?

freshwater deep sea saltwater casting ice

snorkel stream casting

What seasons of the year do you fish most? Spring Summer Fall Winter

How many times a year do you get to fish? ________ What is your favorite species of fish to catch? ________

Redirecting the attention to this fee fishery, what is attractive about this operation? ______________________________

What could the owner do to improve this place? ______________________________

What other species of fish would you like the owner to stock in these ponds? ______________________________

What size of fish do you like to catch? ______________________________

How many pounds of fish do you want to take home after a successful catch? ______________________________

Who will clean your fish? Self Here

While here, did you buy? Bait $_________ Tackle $_________ Food/Drink $_________

Type of tackle used? ______________________________ Type of bait used? ______________________________

Interviewer Signature __________________________________________
Anglers were asked why they came to the fee fishing location, rather than go to a public fishing area. The most common response was "good fishing" (conditions, sure of a catch, fish taste good, prefer these species), as reported by 35% of those interviewed. The second most common response overall was "family/kids" (20%), while "amenities" (convenience, handicap accessible, bathrooms, concessions) and "fun and safe" (no drunks, no snakes, no crowds, no underbrush) scored third and fourth at 15% and 13%, respectively. The number one response by men was "good fishing," whereas the top answer among women was "fun and safe."

The number of pounds of fish fishermen want to catch was significantly greater among the rural populace than the urban (14 pound average versus 9 pounds), suggesting that rural fishermen may rely more on fish as a source of food for their families than do urban customers. The most popular size range of fish to catch was one to three pounds; yet one in six fishermen did not indicate a preferred size.

When asked if they had fished at the pay lake or fee fishing pond before, surprisingly nearly half of the respondents indicated no, yet frequent fishermen comprised a major portion of anglers fishing at rural locations. In response to how often they fee fished, 35% of all those surveyed had not fee fished before, 40% fee fished less than once a month and 20% were frequent fee fishermen, doing so more than once a month. Angler loyalty at a site may be explained by the fact that three-fourths of those interviewed did not know of another fee fishery, and over 90% said they would return to the location where the interview occurred to fish again.

Fishermen were asked what they liked about the fee fishing at the particular location, and the leading response was, again, "good fishing" (25%) with "aesthetics" (20%) and "clean/safe" (17%) rounding out the top three responses. As for improvements suggested for the fee fishing operation, 60% offered none. The top three responses for all fishermen who indicated improvements could be made were "more and/or bigger fish" (25%), "seating and tables" (20%), and "more shade trees/landscaping" (18%).

When asked what other type of fishing do you participate in, freshwater fishing (for bass or trout or crappie) was the most common response (55%), followed by saltwater fishing (25%). Bass is the most popular fish, while catfish is second. The most popular season for fishing was summer (78%), followed by spring, then fall and winter, respectively.

Conclusions and Observations

Fee fishing is well established and increasing in the Southern U.S. Marketing of fish through fee fishing ponds and pay lakes on small farms provides a convenient opportunity for anglers to practice their sport and put food on the table—an additional wrinkle to the farm-to-fork concept.

Although fishing for food is gaining popularity, partly out of necessity for the low income wage earners (many are Hispanic in the South), successful fee fishery operators market more than just fish. The value of the recreational experience received by the angler outweighs the value of the fish. A recreational experience consists of five basic parts: anticipation, travel to the site, on-site experience, travel from the site, and reconciliation of the overall experience. Although the value of the fish alone does not always figure predominantly in the overall recreational experience achieved, fee fishing operators should strive to provide consistently good catches or the business will eventually fail.

Poor management is the major cause of failure of fee fisheries. In addition to possessing aquaculture skills, the operator must possess managerial expertise and have a willingness and ability to work with the public. Design aspects are also important for the successful management of the overall aquaculture operation. Parking, live wells, concessions, fishing piers for the handicapped, and life saving equipment are but a few adaptations needed. Fee fishing and pay lakes can be sources of additional income for small, limited resource farms in the Southeast.