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MARINAS IN ALABAMA

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Marinas in Alabama*

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THE PLEASURE BOATING BOOM had its beginning with economic prosperity that followed World War II. This period of prosperity has continued to the point that today ownership of a motor powered pleasure boat is within the economic reach of the majority of American families. As a result, boating is now one of the most popular and most important recreational activities in the United States.

Pleasure boating is especially popular in states like Alabama that are blessed with abundant water resources. The full recreational and economic impact of boating is now occurring in Alabama, which has nearly a million acres of recreational water and a nearly year-round boating season. Boat ownership data reveal that increasing numbers of Alabama families are purchasing boats. About 1 family out of 12 owned a pleasure boat in 1960, but by 1970 this was up to 1 for every 7 families. Boat registrations reached 150,000 in 1973, and the number continues to increase, Table 1. Before the energy shortage became apparent, State officials in charge of boat registration predicted a 6 to 7 percent annual increase in registration through at least 1980. Thus, boating and related businesses are of economic importance to Alabama and this importance is likely to grow.

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Item	1960	1970	Percentage increase 1960-70
	Number	Number	Percent
Total population Boats registered Total families Families per boat	3,266,740 65,929 790,017 11.98	3,444,165 125,712 874,659 6.96	5.43 90.67 10.71

Table 1. Boat Ownership and Population Trends in Alabama, 1960 to 1970

Source: U.S. Census and Alabama Department of Conservation and Natural Resources.

Tourism and recreational travel are big businesses in Alabama, ranking third behind manufacturing and agriculture in terms of employment and income in 1973. Outdoor recreation is the heart of Alabama's tourism industry, and water based activities are the most popular (swimming, fishing, boating, and water skiing in that order). Use of a boat is essential for two of these activities, of course, and fishing is often done from a boat. Thus, three of the four popular activities involve boating.

Boating and related activities are projected to increase greatly between 1970 and 1980, according to the 1970 Alabama Statewide Comprehensive Outdoor Recreation Plan: water skiing will increase 148 percent, boating 96 percent, and fishing 37 percent.

NEED FOR STUDY OF MARINAS

Many Alabamians who participate in boating, water skiing, or fishing patronize water-oriented marinas for such services as boat storage, rental, or launching; purchase of boat fuel, oil, equipment, and bait and tackle; boat and motor repairs and maintenance; and various other goods and services provided by such businesses throughout the State.

Since little was known about marina businesses in Alabama, the Auburn University Agricultural Experiment Station team of economists engaged in comprehensive outdoor recreation planning studied water-oriented marina businesses to determine: (1) location of marinas throughout the State; (2) services and facilities available to the boating public; (3) business problems peculiar to the industry; and (4) land, capital, and labor resources required for establishing these businesses.

The relative magnitude and importance of boating and marinas in Alabama is indicated by data collected. In 1972, at least 450

water access areas with boat launching ramps were open to the public. These included some 350 marinas, fishing camps, and resorts. About 125 businesses, some of which also serve as marinas, sold new boats. Most business facilities located at water access areas across the State were privately owned and operated, although four large marinas were operated by municipal and county governments.

With the demand for marina services and facilities growing with the rapid increase in percentage of families owning boats, private and public investment in marinas is expected to also increase. In fact, the demand for boat facilities is increasing even more rapidly than new boat registrations. Since Alabama has become more urban, more families are living in apartments or other dwellings which lack the space to store a boat. Thus, a larger percentage of boat owners are potential customers of boat storage facilities.

Current information regarding marina businesses is necessary so that proper decisions regarding private and public investment in additional facilities can be made to help assure success of such businesses.

METHOD AND SCOPE OF THE STUDY

For purposes of this study, a marina was defined as a privately owned water oriented business with at least the following facilities: (1) a boat launching ramp, (2) marine gas and oil, (3) a dockside fuel pump, and (4) either wet or dry storage areas for boats of at least 16 to 20 feet in length. In 1973 there were about 50 such businesses in Alabama, Figure 1. In addition, there were about 100 "fishing camps" which had some, but not all, of the mentioned facilities. At least four marinas were owned and operated by municipal and county governments, but these were not studied since government operated facilities were not within the scope of this study.

A questionnaire was designed and administered to obtain financial, managerial, seasonal, locational, and facility information from owners or managers of virtually all Alabama marinas in 1973. All personnel interviewed were cooperative, but inadequate business records prevented some from providing all of the desired information. Therefore, the number of marina operators responding to various questions differed.

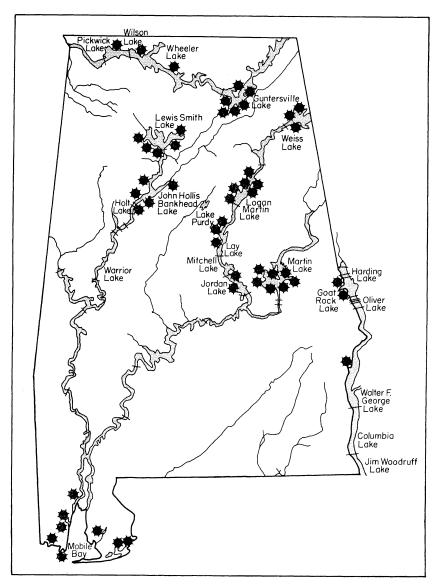


FIG. 1. Location of marinas studied in Alabama.



FIG. 2 All marinas included in the study maintained a boat launching ramp.

Facilities of Marinas

A broad range of boating and related facilities was maintained by marina owners. All marinas included in the study had boat launching ramps, marine gas and oil sales, dockside fuel pumps, either wet or dry storage areas for boats, and rest rooms. A majority also offered boat rental, boat repairs, motor repairs, beverage sales, fishing tackle sales, grocery sales, and picnic tables for the use of customers, Appendix Table 1.



FIG. 3. Gas and oil sales for boats was an important business of marinas.



FIG. 4. A majority of the marinas studied offered boats for rent.

About one-third of the operators of marinas studied offered dry storage facilities. Average capacity of such facilities was about 60 boats as shown below:

Facilities	Average number of units
Dry storage buildings	60.6 boats
Wet storage docks	57.0 boats
Tent camping spaces	50.9 tents
Trailer camping spaces	36.7 trailers
Picnic tables	16.6 tables
Motel accommodations	6.5 units
Cabin accommodations	4.5 units
Boat launching ramps	1.8 ramps

About 43 percent of all marinas studied maintained wet storage docks for boats. Average capacity was 57 boats.

About half of the marinas had lodging facilities of some type. Although four operated motel units, hookups for camping trailers were the most common type of lodging facility provided.

The exact combination of facilities and services offered by each particular marina business was determined by location and type of clientele, as well as previous experience and financial resources of the owners. Almost all managers interviewed had recently added new facilities and services or had discontinued facilities and services provided the previous year in an effort to obtain optimum results.

The average marina in Alabama occupied just under 7 acres of land. All managers interviewed reported that they owned the land occupied by the marina. In addition, the managers reported owning an average of 5.3 additional acres adjoining their marina site not currently used for the business operation. Fewer than half owned unused land, however, and about 55 percent of the managers reported they utilized all of their land. Thus, most marinas could not have expanded such facilities as dry storage sheds or parking lots without the acquisition of additional land.

Seasonal and Temporal Aspects

Marina businesses, like virtually all outdoor recreation enterprises, experience highly seasonal business cycles. Most American families take their annual vacations during the summer months while schools are not in session. Most fishing areas in Alabama are at their best conditions for anglers during spring and summer. It is logical to expect that demand for facilities and services offered by marina businesses should reach a peak during the summer months, and data provided by the marina managers confirmed this observation.

When asked to name their most active business months, every marina manager listed both June and July among the busiest. However, only 78 percent listed August and half listed May. Marinas used mainly by fishermen experienced an earlier season, with business increasing sharply in March and April. The same firms also tended to have considerable business during the early fall months. Marinas used mainly by boaters engaged in water skiing and pleasure boating experienced a sharp business increase the last week in May (when the school term ended) and a drastic decrease in activity the week after Labor Day (when the school term commenced).

The most notable exceptions to the general seasonal pattern were the marinas located on the Gulf Coast. These firms experienced considerable demand for their services during the late fall months when off-shore fishing in the Gulf of Mexico is often

at its best. Many of these marinas also reported sales to transient boats passing through on the way to Florida for the winter season.

The American concept of "the weekend" is unique throughout the world. In most modern nations, leisure time and outdoor recreation are associated primarily with national, regional, and religious holidays. On the other hand, Americans are often thought of as working hard during the 5-day work week and playing hard during the 2- or 3-day "weekend." This pattern of recreational habits was exhibited by customers of Alabama's marinas. About 95 percent of marina managers reported that half or more of their business was on weekends, as shown below:

Percentage of business occurring on weekend	Percentage of firms
25 to 49	4.8
50 to 74	52.4
75 to 100	42.8

No manager reported that less than 25 percent of business occurred on the weekends.

Operating hours of marinas varied considerably, both from firm to firm and season to season. Some managers reported being open for business 10 hours per day during the "busy season," and about 13 percent stayed open 24 hours per day. The average for all marinas was 14 hours per day during the busy season. All marinas open for business 24 hours per day had managers who resided on or near the premises of the business. Virtually all managers reported reduced business hours during the "slack season," but only three said they closed. The marinas that operated during the slack season were open over 11 hours per day.

Marina managers ranked external factors (those beyond control of management) according to relative importance in affecting demand for services of the businesses, Appendix Table 2. General weather conditions were the most important factor influencing marina sales. Many managers said actual weather conditions were not as important as predicted weekend weather. Marina customers generally monitored weekend weather reports during the latter part of the week, and decided at that time whether they would go boating during the following weekend. If alternative plans were made because of predicted unfavorable weather, fair weather on Saturday or Sunday did not attract these potential customers to the marina. This was especially true for customers who had to travel relatively long distances to reach the marina.

Locational Factors

By the definition used in this study, a marina must be located adjacent to a body of water used by boaters. However, many locational factors — both natural geographic features and manmade alterations such as roads — determine whether a marina business occupies a favorable location. Locational factors such as access by automobile, access by boat, prevailing wind conditions, and strength of water current are difficult to quantify. Furthermore, locational advantages and disadvantages of a business site may change over time, regardless of business management. For example, a new highway or bridge may increase or decrease access to a particular marina relative to a competing business. Thus, once a marina has been established, future locational factors are difficult to predict and are usually beyond the control of the business owner.

Most of the marinas studied were located on isolated rural roads, and a few could be reached by automobile only by traveling on unpaved roads. While some marinas were located near important highways, few were ideally located for ease of access by both boat and automobile. Generally, location of the business with respect to boat access was not as important as its automobile access. About two-thirds of the marina managers interviewed estimated that no more than one-fourth of their total business was derived from customers that arrived at the marina by boat, as shown below:

Percentage of customers arriving by boat	Number of firms
0-25	23
26-50	6
51-75	4
76-100	2

Marina managers were asked to estimate the origins of their customers according to whether they: (1) rent boat storage spaces, (2) purchase fuel and oil, (3) use the boat launching ramps, or (4) purchase groceries and other sundry items. A general pattern was discernible based on the estimates of the responding managers. In general, customers who rented boat storage spaces lived the greatest distance from the marina. Many such customers typically resided in relatively large metropolitan areas, and stored their boats at a marina rather than trailer them to the water each time they went boating. Excluding those who rent storage space, most customers who purchased fuel and oil

from a given marina were either owners of recreational (or permanent) homes in the immediate area (within several miles) or persons vacationing in motels and resorts near the marina. Customers trailering boats to a marina for launching each time they used the boat tended to be intermediate in origin, often residing within a 25-mile radius of the marina they used for boat launching. No general pattern was apparent for customers who frequently purchased their groceries and supplies at a particular marina.

Type of Ownership and Labor Requirements

A majority of the marina businesses analyzed (56 percent) were organized as single proprietorships. One-fourth were corporations and the remaining 19 percent of firms were organized as partnerships.

About one-fourth of the marinas in Alabama were basically one-man operations. These small marinas were generally owned by an individual who resided on the premises of the business establishment. The single owner-manager often used the labor of his family, employing additional hired labor only during the peak summer months. Managers of marinas of this type reported they required no more than 4,000 man-hours of labor per year (including their own) to maintain their business, Appendix Table 3. The average firm in this category provided full-time employment for less than one man (0.8 man), and part-time or seasonal employment for two additional workers.

Nearly half of the studied marinas required between 4,000 and 8,000 man-hours of labor annually. Many firms in this category were not much larger in terms of storage facilities than the smallest marinas, but they had boat and motor repair enterprises which required more full-time hired labor. Marinas in this category employed an average of nearly two full-time employees and almost four part-time and seasonal employees.

The remainder of the marinas studied employed more than 8,000 man-hours of labor annually. Firms of this size usually provided full-time employment for 5 to 10 men, and part-time or seasonal employment for 4 to 6 additional workers.

Financial Characteristics of Marinas

Each marina in Alabama represented an average capital investment of about \$191,000, Appendix Table 4. However, capital

investment ranged from \$30,000 each for several small marinas to well over \$250,000 each for a few of the State's largest. The median was about \$155,000.

As expected, marinas with higher capital investments were earning larger average gross revenues, Appendix Table 4. Data provided by marina managers were not sufficient to estimate net profits for 1972, but gross revenue for all marinas studied averaged about \$102,000.

Marina managers were asked to reveal which of the firm's business enterprises accounted for the largest portions of annual gross revenue. The responses varied, since not all marinas maintained the same combination of enterprises. Of the interviewed managers who ranked the various enterprises in descending order of importance, nearly half listed boat storage as their most important source of revenue, Appendix Table 5. Generally, the second most important source of gross revenue was fuel and oil sales.

The monthly boat storage charges of marinas analyzed were determined largely by type of storage facilities provided, size of boat, and length of the time the boat was stored. For a given size boat, charges for dry storage were generally lower than for wet storage. Most marina managers charged a flat monthly storage fee. To stabilize business income over the entire year, however, managers encouraged boat owners to rent storage space on a 12-month annual basis. Managers frequently discounted the charges considerably if boat owners leased on an annual basis. A few marina managers based the charge for rental space

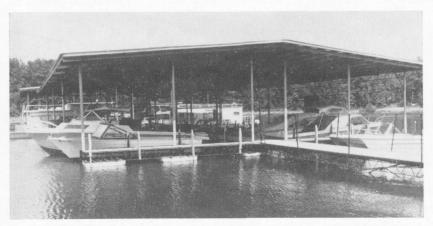


FIG. 5. Roofed boat docks cost more per unit of capacity than open ones.



FIG. 6. Floating docks were used on lakes where water level fluctuated widely.

on boat length, charging an average of \$1.06 per foot-length for dry storage, Appendix Table 6. Average monthly storage charges for an 18-foot boat were about \$13 for dry storage and \$15 for wet storage. However, most marina managers indicated that boat storage charges would increase during the coming season.

Because a marina must be located on waterfront property, site purchase was often the largest capital expense involved in establishment of the business. Average value of land occupied by the studied marinas was over \$7,200 per acre, and the average marina occupied about 7 acres. Thus, investments in real estate of \$50,000 were common. In fact, value of the site for all marinas accounted for an average of about 41 percent of the total business investment. Land value as a percentage of total business investment ranged from about 20 percent to 67 percent.

The unit cost of boat docks varied considerably, depending on whether the docks were fixed or floating and whether they were roofed or open. (A unit is defined as storage space for one boat of 18-foot length or less.) Floating docks were used on lakes where the water level fluctuated considerably, such as Lake Martin where water level dropped about 15 feet during the winter. The average unit cost of fixed docks (on permanently affixed pilings) was considerably lower than the average unit cost of floating docks. Boat storage docks had an average value

of \$531 per unit.

Dry boat storage buildings maintained by the firms analyzed were basically of two types: (1) sheds where each boat was stored on a trailer (each owner removes his boat by hitching the trailer to an automobile); or (2) large, high-ceiling buildings where boats were stored in warehouse-type facilities (boats stacked and stored in such facilities could only be removed for launching by the use of a large fork-lift maintained and operated by the marina business). Dry storage facilities maintained by the firms analyzed had an average unit cost of \$235. The unit cost of warehouse-type storage facilities represented a larger initial investment than storage sheds, but most owners of such facilities reported lower maintenance costs.



FIG. 7. Warehouse-type storage sheds were more expensive to build but owners reported lower maintenance costs for this type facility.

Charges for the use of boat launching ramps at the marinas studied varied from no charge up to \$1.00, as shown below:

Launch charge	Percentage of firms
No charge	. 35
50¢	. 15
75¢	. 5
\$1.00	45

No marina manager reported boat launching charges as a major source of income. Many managers felt that any charge for boat launching tended to discourage potential customers from patronizing their marina because free boat launching ramps provided by the State were often located near or at the marina.

When asked to describe their prevailing business trend for the past 5 years, the vast majority of the marina managers (82 percent) reported increasing business during the period. Only 10 percent reported declining business activity, and 8 percent had experienced no change. Most of the marinas experiencing decreasing business were smaller firms owned by individuals who had not been competitive in maintenance and operation. Several marinas that had been in business only about 5 years reported increases of 75 percent or more. Of the firms with an increase in business, over half experienced growth rate of 5 to 24 percent, as shown below:

Percentage annual business increase	Percentage of firms
5-24	53
25-49	19
50-74	16
75_and over	. 12
Total	100

Marina managers were asked to specify unprofitable business activities. No single activity was believed to be non-profitable by more than a small minority of the managers, although 86 percent listed an activity they considered unprofitable, as shown below:

Unprofitable activity	Number of firms
Boat launching	7
Fuel sales	6
Cafe	6
Grocery sales	5
Swimming and picnicking	5
Bait sales	3
Sale of sundry items	3
Boat rental	2
Issuance of fishing licenses	2
Other activities	4

All managers indicated non-profitable activities were maintained only to attract customers who otherwise would purchase needed items or services elsewhere. No manager reported large losses from non-profitable activities; rather, the unprofitable activity was warranted since the net profit of the entire business was increased. For example, users of a non-profitable, free launching ramp tended to purchase bait, gas, and other supplies at the marina providing the free ramp.

Use of Advertising

Advertising is an important source of new customers and increases sales for many businesses. Some types of businesses use advertising more extensively than others, often depending on the number and behavior of competing firms. Marina managers were asked to describe the extent and types of advertising used by their businesses.

Few marina managers advertised extensively. About 78 percent of the firms studied used little or no advertising. Only about 8 percent described their advertising activities as extensive, leaving 14 percent in the moderate classification.

At least 16 different advertising media were used by marina managers, with road signs and general circulation newspapers used most commonly, as shown below:

Advertising medium	Number of managers reporting
Road signs and billboards	17
Newspapers (general circulation)	16
Radio	10
Maps of lake	9
Word-of-mouth	7
Telephone directory (yellow pages)	5
Displays at boat shows	4
Television	4
Handbills	3
Boating directories	3 °
Other	8

Spot radio commercials and maps of the various lakes with the marina's location marked were also popular forms of advertising. Nearly all newspaper and radio advertising was done during the boating and fishing season. More expensive advertising media, such as television spot commercials and displays at boat shows, were used almost exclusively by marinas that sold new boats and motors.

Many marina managers reported special problems with the use of road signs, which were often damaged or removed by vandals. Furthermore, because many marinas were located in isolated rural areas on unmarked county roads, numerous road signs were necessary to provide adequate directions for potential customers. Several marina managers reported their signs were removed by State or county highway department work crews, apparently due to violations of laws governing the location of roadside signs. Other managers said road signs or billboards were needed on interstate highways to attract tourists who are not familiar with the particular lake or business. However, the managers felt they could not afford to construct and maintain large enough signs to be seen by motorists on interstate highways since new business generated by the signs might not cover costs of the signs.

Customer Compliments, Complaints, and Business Problems

Land, labor, capital, and managerial skills are often thought of as being the most important resources for the operation of a profitable business. In theory, if these resources are used to produce a good or service desired by consumers, and at a price which covers all costs, the business will be successful. However, customer satisfaction is a requirement for success and this depends on many factors. Successful business managers are aware that most customers place a considerable value on courteous, personal service. The customers of Alabama marinas do not seem to be exceptions.

When asked which aspects of their business were the subject of compliments from their customers, marina managers reported six different categories, Appendix Table 7. About one-third of all compliments resulted from good service and friendliness of marina employees. However, maintenance of the marina facilities, including rest rooms, ramps, and snack bars, brought the most frequent compliment.

Marina managers reported relatively few complaints from their customers. More than half of all complaints received concerned inadequate or poorly-maintained facilities. Insufficient automobile parking space and poor launching ramps were among the facilities included in customer complaints. When questioned

about their business problems, marina managers reported at least six different types, as shown below:

Nature of problem	Number reporting
Unable to hire dependable employees	16
Inadequate cash flow	6
Vandalism on premises	6
Variation of water level in lakes	3
Maintenance of outdoor facilities	3
Lack of customers	3
Other	9

More than one-third of all managers interviewed said they were unable to hire dependable employees. Many thought relatively low wages and the seasonal nature of marina employment made it especially difficult to hire dependable adults. Thus, many managers hired high school and college students during the peak summer months, some on a full-time basis and others to work during the weekend.

Water Pollution Prevention

Recent citizen awareness of the relatively rapid deterioration of the environment has been felt by nearly every industry in the United States — from apple production to zinc mining. The boating industry is no exception. The discharge of untreated sewage, fuel, oil, and other water pollutants from pleasure boats is now recognized as a present or potential public health problem by officials in nearly every state.

A recent survey by the Boating Industry Association revealed that at least 36 states now have laws governing boat toilets on some or all of their waters. About half of these states permit the use of treatment devices or holding tanks; the remainder require retention systems for dockside pump-out.

In 1973, the U.S. Coast Guard, State Health Department, State Conservation Department, and other agencies implemented existing Federal and State laws to require owners of newly purchased boats with toilets to have sewage holding tanks aboard. Boats already in use were allowed to use self-contained sewage treatment systems which meet certain standards. Thus, pump-out facilities for Alabama pleasure boats were necessary for boaters to comply with the law.

Marina managers were asked to express their willingness to provide sewage pump-out and holding facilities for the use of boaters. About one-fourth indicated they were willing to install pump-out facilities if the demand for them became apparent. On the other hand, about 15 percent of the managers would not construct sewage handling facilities under any conditions. The remaining managers indicated a willingness (but not eagerness) to install boat pump-out facilities if certain conditions prevailed, as shown below:

Conditions under which will install facilities	Number of firms
When necessary	12
Only under "breakeven" financial conditions	9
Only under profitable financial conditions	1
Only if government pays cost of installation	1
Will not install under any conditions	7
N.A. ¹	20

¹ Some managers felt that the question was not applicable as their firms service only small boats without toilet facilities.

The willingness of marina managers to provide sewage pumpout facilities seemed to be influenced by location of their business. For example, the managers of nearly all marinas studied on Lake Martin expressed a willingness to cooperate with pollution abatement regulations. This lake, located northeast of Montgomery in central Alabama, was one of the cleanest and most pollution-free bodies of water in the State in 1973. Nearly all managers interviewed in the area seemed to realize that the unspoiled nature of the lake represented an economic asset to their business, and they planned to assist in maintaining the lake in its unpolluted condition.

Managers of marinas located on the Gulf Coast generally were not as eager to provide sewage pump-out facilities for the use of their customers. Most of these managers indicated they did not believe that water pollution from marine toilets was a problem.

IMPACT OF ENERGY CRISIS

Because of the uncertainty of government policies, it is difficult to assess the impact of the current fuel shortage on the outdoor recreation industry in Alabama. Either conservation measures or gasoline rationing would certainly affect outdoor recreation, both directly and indirectly. For example, should gasoline be rationed through a policy which would restrict marine fuel purchases as well as automobile purchases, marina businesses in Alabama would be affected directly because the sale of fuel is usually an important business activity. The same firms also could be indirectly affected because restricted automobile usage would

limit frequency of weekend boating by marina customers living relatively long distances from the marinas.

On the other hand, because the towing of a boat and trailer behind an automobile reduces the gas mileage of the auto, many more boatowners may choose to store their boats at marinas on a permanent basis. Such actions would then increase the demand for boat storage facilities, already in short supply in many areas of the State.

Various gasoline conservation proposals were being considered by government agencies at the time of this writing. All recognize outdoor recreation is an important sector of the nation's economy. Thus, if the government must ration gasoline, marina operators are assured that gasoline for boating will not be eliminated entirely due to higher fuel usage priorities. At the time of this study, marina managers could only speculate about overall effects of the energy shortage on their businesses.

SUMMARY

Boating is a growing outdoor recreational activity in Alabama. From 1960 to 1970 the number of families with boats in the State grew from about 1 out of 12 to about 1 out of 7. Demand for boating should double between 1970 and 1980, while for the related activities of fishing and water skiing, increases of 37 and 148 percent, respectively, are expected.

For purposes of this study, a marina was defined as a privately owned water oriented business with at least these facilities: (1) boat launching ramp, (2) marine gas and oil, (3) a dockside fuel pump, and (4) either wet or dry storage areas for boats of 16 to 20 feet in length. In 1973 there were about 50 such businesses in Alabama. This definition eliminated from the study about 100 "fishing camps," at least 4 marinas owned and operated by municipal and county governments, and innumerable other businesses across the State that engaged in boat rental, sales, or supplies.

Many Alabamians who participate in water-based activities use the facilities and services of a water-oriented marina. Little information about marina businesses in Alabama was available before this 1973 outdoor recreation study of marina businesses to determine: (1) the location of marinas throughout the State;

(2) services and facilities available to the boating public; (3) business problems peculiar to the industry; (4) locational and seasonal factors influencing the success of marina businesses; and (5) land, capital, and labor resources required for establishment of a marina business.

Most marinas are located where both water resources and proximity to population centers are favorable. The main clusters of marinas located in the study were in the area of Mobile Bay, Martin Lake, Logan Martin Lake, Guntersville Lake, Lewis Smith Lake, Holt Lake, Weiss Lake, and Lay Lake. Marinas were also located along Perdido Bay, Wilson Lake, Wheeler Lake, John Hollis Bankhead Lake, Jordan Lake, Goat Rock Lake, Walter F. George Lake, and the Alabama River lakes.

Alabamians use marinas for either boat storage, boat rental, fuel and oil purchases, boat launching, boat and motor repairs, bait and tackle purchases, or boating equipment purchases. Some marinas provide a wide range of other facilities and services, including lodging accommodations, picnic tables, groceries, and snack bars.

Marina business is seasonal, with June and July invariably the most active business months. If fishermen make up a majority of the clientele, the third busiest month is May; if families with school age members are major customers, then August is third busiest. Marinas near Gulf Coast fishing water have less business drop in the fall than those located in other areas of the State. During the in-season months, business is most active on weekends.

Locational factors that influence marina business include ease of access by automobile, ease of access by boat, strength of water current, and prevailing wind conditions, all of which are difficult to quantify. Few marinas are ideally located for both boat and automobile access. Generally, automobile access is the more important of the two. Once located, however, marina managers have little control over factors (such as road development) that might affect the favorableness of their location. The distance a customer travels to a marina may determine the facility or service he purchases. For example, a customer who lives in the immediate area of a marina is less likely to rent storage space than one who lives far away in a metropolitan area.

The majority of marinas in the sample were single proprietorships. One-fourth were basically one-man businesses that used family or seasonal labor on occasion. Those offering boat repair services needed more employees. About one-third of the managers reported that seasonal nature of the business made it difficult to find dependable labor.

Investments ranged from \$30,000 to \$500,000, with the average being \$191,000 and the median \$155,000. As might be expected, larger investments brought larger gross returns. Because marinas must be on waterfront property, land purchase was usually the largest single capital expense. Dock costs varied considerably according to the design. Floating docks were generally more expensive than fixed docks, and roofed docks more expensive than open ones. Warehouse-type storage facilities utilizing fork-lift machinery generally cost more to construct than storage sheds where boats were parked on their trailers. However, warehousetype facilities were reported to have lower maintenance costs. Managers listed boat storage as their most important business item; fuel and oil sales were next. No single item was named as being generally non-profitable, although some managers maintained non-profitable items to attract customers who would otherwise purchase all items elsewhere. Eighty-two percent of the managers interviewed indicated they had experienced increasing business over the past 5 years.

Seventy-eight percent of the marinas used little or no advertising. Road signs and newspaper commercials were most commonly used advertisements, although some marinas used radio commercials during the summer. Roads signs were used to provide directions for customers; however, managers reported some difficulties in keeping these signs maintained. Only 8 percent of the marinas, generally those selling new boats, advertised so extensively as to use television commercials or boat show displays.

Managers reported they received the most compliments for proper maintenance of such facilities as rest rooms, launching ramps, and snack bars. Most complaints arose from inadequate maintenance or insufficient facilities, such as poor landing ramps or too little parking space.

Marina managers may be faced with two problems because of environmental measures. The first concerns water pollution. More stringent laws regarding the use of toilets on pleasure boats have created a need for sewage pump-out and holding facilities. The majority of managers questioned could forsee adding such facilities if demand warranted it, while 15 percent said they would not provide such facilities under any conditions.

The second problem concerns the energy shortage. This could affect the marina business indirectly, in that less gas is available for recreational travel, and directly, in that less gas is available for boating. On the other hand, the demand for storage space could increase if storage proves less expensive than hauling boats back and forth to a marina. If gasoline rationing should go into effect, the proposals under discussion recognize outdoor recreation as a major industry, and thus include provisions of boating in their considerations. Marina managers could only speculate on the effect of a gasoline shortage.

APPENDIX

Appendix Table 1. Boating Facilities and Related Enterprises at Alabama Marinas, 1973

Facility	No. of firms	Percentage of firms
	No.	Percent
Boating		
Boat launching ramp	5 0	100
Marine gas/oil sales	50	100
Dockside fuel pump	50	100
Wet storage docks	43	86
Boating equipment sales	40	80
Dry boat storage	34	68
Boat rental	34	68
Boat repair service	30	60
Motor repair service	29	58
Motor sales	18	36
Boat sales	18	36
Motor rental	16	32
Lodging		
Trailer camping hookups	17	34
Cabins	12	24
Tent camping spaces	12	24
Motel units	4	8
Other		
Rest rooms	50	100
Beverage sales	46	92
Fishing tackle sales	$\overline{42}$	84
Grocery sales	33	66
Picnic tables	27	54
Restaurants	10	20

Appendix Table 2. External Factors Influencing Marina Business, Alabama, 1973

To allow	Ranking of factor by firms		
Factor	First	Second	Third
	No.	No.	No.
General weather conditions	27	10	4
Fishing situationWater level in lake	$\overset{\circ}{4}$	7	8
Calendar ¹ Special events ² Special events ² Special events ³ Special events ⁴ Special events ⁵ Special events ⁶	$\frac{3}{1}$	11	9 3
Other factors	Ī	11	1

¹By calendar is meant the normal passing of the months and occurrences dictated by the calendar, such as completion of the school term.

² Fishing rodeos, boat races, and other specially scheduled events.

Appendix Table 3. Annual Hired Labor Requirements of Marinas' in Alabama, 1973

Man/hours of labor²	Average number full-time employees	Average number temporary employees ³	Number of firms
	No.	No.	No.
Up to 4,000	.8 1.9 4.0 6.0 9.5	2.0 3.8 4.3 5.1 6.5	12 24 3 9 4

¹ Includes manager and hired employees who work only at marina; excludes employees who work in restaurants of those marinas with such facilities.

APPENDIX TABLE 4. CAPITAL AND REVENUE OF MARINAS, 1973

Capital investment	No. firms	Average gross revenue
	Number	Dollars
Less than \$50,000	5	17,300
\$50,000 to \$99,999	7	82,333
\$100,000 to \$249,999	13	110,000
\$250,000 or more	6	240,800
Average all firms-\$191,000 capital investme	nt, \$102,183	average gross revenu

Appendix Table 5. Business Activities Contributing Largest Portion of Gross Revenues to Marina Businesses, 1973

A - Limiter	Ranking of activity by firms		
Activity	First	Second	Third
	No.	No.	No.
Boat storage (wet and dry)	15	5	4
Fuel and oil sales	8	11	3
Boat sales and rental	4	1	3
Grocery and beverage sales	3	4	5
Rental of lodging accommodations	3	4	
Boat and motor repairs	1	4	3
Bait and tackle sales	1		
Restaurant or cafe		3	1
Sale of boating supplies		2	4

 $^{^{2}\,\}mathrm{For}$ conversion to full-time job equivalent, divide annual man/hours of labor by 2,000.

³ Some temporary employees work part-time every month of the year, some work full-time only during peak business months, and some work part-time only during peak business months.

Appendix Table 6. Average Monthly Boat Storage Charges at Alabama Marinas, 1973

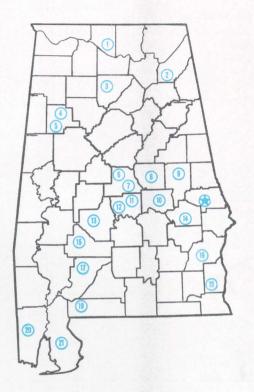
Type storage	Monthly charge
Wet storage	Dollars
Open slips: (no roof) Fixed monthly rate Utilities furnished No utilities furnished Other monthly rate (charge per foot-length of boat)	19.21 15.50 .93
Covered slips: (with roof) Fixed monthly rate Utilities furnished No utilities furnished	31.50 18.40
Dry covered storage	
Fixed monthly rateOther monthly rate (charge per foot-length of boat)	12.69 1.06

Appendix Table 7. Areas of Customer Compliments and Complaints to Marina Managers, Alabama, 1973

Category	Firms reporting compliments	Firms reporting complaints
	No.	No.
Service Facilities Repair service	19 23 4	17 4
PricesOther	$egin{array}{c} 3 \\ 6 \\ 4 \end{array}$	2

AGRICULTURAL EXPERIMENT STATION SYSTEM OF ALABAMA'S LAND-GRANT UNIVERSITY

With an agricultural research unit in every major soil area, Auburn University serves the needs of field crop, livestock, forestry, and horticultural producers in each region in Alabama. Every citizen of the State has a stake in this research program, since any advantage from new and more economical ways of producing and handling farm products directly benefits the consuming public.



Research Unit Identification

Main Agricultural Experiment Station, Auburn.

- Tennessee Valley Substation, Belle Mina.
 Sand Mountain Substation, Crossville.
- 3. North Alabama Horticulture Substation, Cullman.
- 4. Upper Coastal Plain Substation, Winfield.
- 5. Forestry Unit, Fayette County.
- 6. Thorsby Foundation Seed Stocks Farm, Thorsby.
- 7. Chilton Area Horticulture Substation, Clanton.
- 8. Forestry Unit, Coosa County.
- Piedmont Substation, Camp Hill.
 Plant Breeding Unit, Tallassee.
 Forestry Unit, Autauga County.

- 12. Prattville Experiment Field, Prattville.
 13. Black Belt Substation, Marion Junction.
 14. Tuskegee Experiment Field, Tuskegee.
 15. Lower Coastal Plain Substation, Camden.
 16. Forestry Unit, Barbour County.
 17. Monroeville Experiment Field, Monroeville.

- 18. Wiregrass Substation, Headland. 19. Brewton Experiment Field, Brewton.
- 20. Ornamental Horticulture Field Station, Spring Hill.
- 21. Gulf Coast Substation, Fairhope.